

Where personal income is shifting...

*...and a close-in look
at Iowa (Page 58)*

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BUSINESS WEEK

A MCGRAW-HILL PUBLICATION

FIFTY CENTS

JUNE 27, 1959

Adams, Keeler, Learned & Endacott:
They've put Phillips Petroleum's
research to work tapping new profits
from the oil barrel (Companies)

66



OS 88
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UNIVERSITY MICROFILMS
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ANN ARBOR MI 48106



Photo courtesy Rubbermaid, Inc., Wooster, Ohio

New way to lighten overloaded budgets

Eye-catching color is a "must" in the manufacture of many products, but particularly so in rubber housewares. Equally important in the highly competitive housewares market is the matter of cost. Color opens the sale, but real quality at reasonable cost will always close the sale.

Notice how the housewares above—made by an established leader in the field—blend colorful good looks with readily apparent value. A key reason for their sales success: they contain PLIOFLEX 1713, new oil-extended synthetic rubber by Goodyear.

Used in combination with other rubbers, new PLIOFLEX 1713 was chosen by the firm for its excellent color characteristics, ease of processing, high uniformity and low odor level. What's more, it costs several cents less per pound than previously used polymers, yet can be compounded to maintain end product quality.

Perhaps new Plioflex 1713 can lighten your budget, too. For more information — plus latest *Tech Book Bulletins* on PLIOFLEX 1713 and a full line of synthetic rubbers and rubber chemicals—write Goodyear, Chemical Division, Dept. F-9415 Akron 16, Ohio.



GOOD YEAR

CHEMICAL DIVISION

Plioflex—T.M. The Goodyear Tire & Rubber Company, Akron, Ohio

GENERAL BUSINESS

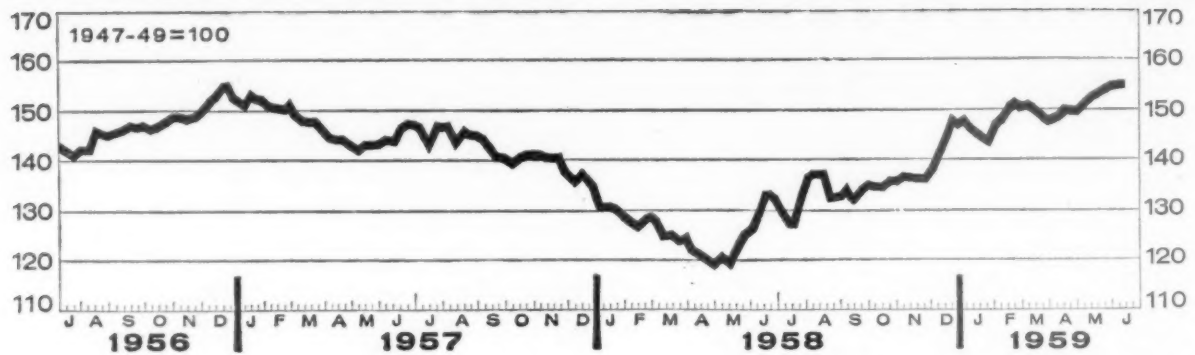
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FIGURES OF THE WEEK



BUSINESS WEEK INDEX (chart)

1953-55 Average	Year Ago	Month Ago	Week Ago	\$ Latest Week
133.3	133.6	153.8	†156.6	*157.2

PRODUCTION

Steel ingot (thous. of tons).....	2,032	1,666	2,650	†2,620	2,627
Automobiles and trucks.....	132,806	110,538	169,551	†164,970	168,839
Engineering const. awards (Eng. News-Rec. 4-wk. daily av. in thous.).....	\$52,412	\$82,604	\$81,948	\$89,752	\$81,590
Electric power (millions of kilowatt-hours).....	10,819	11,941	12,931	13,503	13,331
Crude oil and condensate (daily av., thous. of bbls.).....	6,536	6,345	7,216	7,010	7,017
Bituminous coal (daily av., thous. of tons).....	1,455	1,383	1,376	†1,417	1,506
Paperboard (tons).....	247,488	270,117	317,985	330,025	327,830

TRADE

Carloadings: mfrs., miscellaneous and l.c.l. (daily av., thous. of cars).....	70	58	66	64	66
Carloadings: all others (daily av., thous. of cars).....	47	46	50	50	53
Department store sales index (1947-49 = 100, not seasonally adjusted).....	121	138	137	150	142
Business failures (Dun & Bradstreet, number).....	198	290	259	295	267

PRICES

Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100).....	412.8	398.9	387.4	339.0	388.0
Industrial raw materials, daily index (BLS, 1947-49 = 100).....	89.2	82.9	92.0	92.3	92.2
Foodstuffs, daily index (BLS, 1947-49 = 100).....	90.5	90.9	82.7	82.7	82.0
Print cloth (spot and nearby, yd.).....	19.8¢	17.4¢	19.1¢	19.5¢	19.5¢
Finished steel, index (BLS, 1947-49 = 100).....	143.9	181.5	185.7	186.7	186.7
Scrap steel composite (Iron Age, ton).....	\$36.10	\$35.17	\$35.83	\$38.17	\$38.17
Copper (electrolytic, delivered price, E & MJ, lb.).....	32.394¢	25.205¢	31.555¢	31.505¢	31.465¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.34	\$1.94	\$2.06	\$1.99	\$1.92
Cotton, daily price (middling, 1 in., 14 designated markets, lb.).....	**33.77¢	34.84¢	34.63¢	34.54¢	34.47¢
Wool tops (Boston, lb.).....	\$1.96	\$1.65	\$1.77	\$1.82	\$1.81

FINANCE

500 stocks composite, price index (S&P's, 1941-43 = 10).....	31.64	44.66	58.19	57.04	57.17
Medium grade corporate bond yield (Baa issues, Moody's).....	3.59%	4.54%	5.00%	5.03%	5.04%
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate).....	2-2½%	1½%	3%	3%	3%

BANKING (Millions of Dollars)

Demand deposits adjusted, reporting member banks.....	57,848	57,434	56,222	57,387	57,184
Total loans and investments, reporting member banks.....	84,642	95,988	94,856	94,700	95,229
Commercial and agricultural loans, reporting member banks.....	24,180	30,373	31,674	31,856	32,642
U. S. gov't guaranteed obligations held, reporting member banks.....	33,275	32,399	28,972	28,453	28,072
Total federal reserve credit outstanding.....	26,424	25,939	27,989	27,736	27,994

MONTHLY FIGURES OF THE WEEK

	1953-55 Average	Year Ago	Month Ago	Latest Month
Cost of living (U. S. Dept. of Labor BLS, 1947-49=100).....May.....	114.6	123.6	123.9	124.0
McGraw-Hill Indexes of New Orders (1950=100)				
New Orders for machinery, except electrical (seasonally adjusted)....May.....	104	129	187	169
Construction & Mining machinery.....May.....	111	191	207	217
Engines & turbines.....May.....	106	86	208	175
Pumps & compressors.....May.....	120	178	250	267
Metalworking machinery.....May.....	125	75	187	203
Other industrial machinery.....May.....	95	130	178	148
Office equipment.....May.....	109	145	194	180
New contracts for industrial building.....May.....	128	87	127	114

* Preliminary, week ended June 20, 1959.
† Revised.

†† Estimate.
** Ten designated markets, middling 1½ in.

‡ Date for 'Latest Week' on each series on request.

THE PICTURES—Cover—N. Bleeker Green; 26, 27—George Woodruff; 30, 31—Herb Kratoch; 45—Grant Compton; 72—Ed Maisberg; 84—George Harris; 92—(three left) Herb Kratoch, (bot.) Guido Organschi, (rt.) Sovfoto; 93—(top) Sovfoto, (bot.) Guido Organschi; 146, 147—Kolbe Wheel Escavator; 148—Phillips Chemical Co.; 150—Phillips Petroleum Co.; 151—(top lt. & bot. rt.) Phillips Petroleum Co., (top rt. & bot. lt.) N. Bleeker Green; 152, 154, 156, 158—Phillips Petroleum Co.

Defense Weapon

The telephone is a defense weapon—and an important one.

A manufacturer of rockets, for example, needs data or delivery on a specific part. He picks up his telephone, makes several Long Distance calls, and his problem is solved.

An unidentified aircraft is detected in flight by a radar installation. The information is relayed automatically and instantly over telephone cables to a defense center.

It is then flashed over the network of special Bell System telephone lines which link the country's entire system of continental defense.

The role of the Bell System does not stop there or with the thousands upon thousands of calls that are a part of the manufacture of countless items of defense.

Its Bell Telephone Laboratories are engaged in many important research and development projects for the government. These include the Nike Zeus anti-missile missile system and the guidance system for the Titan

intercontinental ballistic missile.

Western Electric, the Bell System's manufacturing and supply unit, is producing the guidance and control equipment which is the heart and brains of the mighty Nike Ajax and Nike Hercules missile systems.

The Sandia Corporation, a subsidiary of Western Electric, continues to manage the Atomic Energy Commission's Sandia Laboratory, which develops, designs and tests atomic weapons.

Among many other Western Electric defense projects were the 3000-mile Distant Early Warning (DEW) Line in the Arctic and the "White Alice" communication system linking population centers and military installations in Alaska. Both were completed on schedule and turned over to the Air Force.

Another project for the Air Force was the design, production and supervision of installation of a communications system for a guided missile test range extending out to sea.

The backbone of this system is the special underseas cable that stretches 1370 nautical miles from Cape Canaveral in Florida to Puerto Rico. It provides an instant, secret, weather-proof means of transmitting data on missiles in flight.

Radar installations along the way spot the missile's flight position which is flashed continuously to the testing base by cable. So are signals from the missile itself.

Recently the U.S. Air Force asked us to add the communications phases of a ballistic missile early warning system to the other military projects handled by the Bell System.

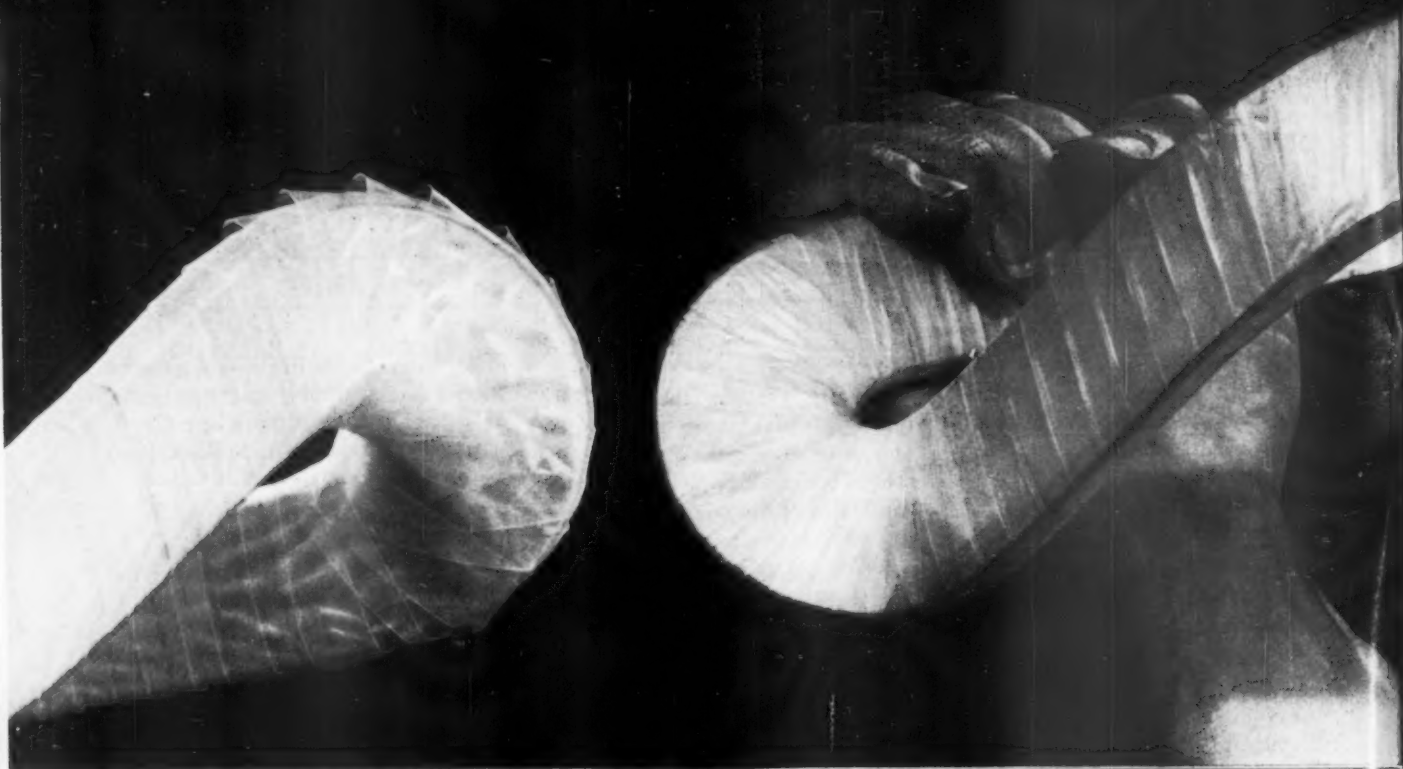
The Bell System is primarily engaged in providing telephone service. But it gives top priority and its utmost effort to the needs of Government whenever it is called upon for work for which it is specially fitted by size and experience.

Particularly when it comes to protecting the country, it's good to use the best scientific knowledge available in the communications field.



**BELL
TELEPHONE
SYSTEM**





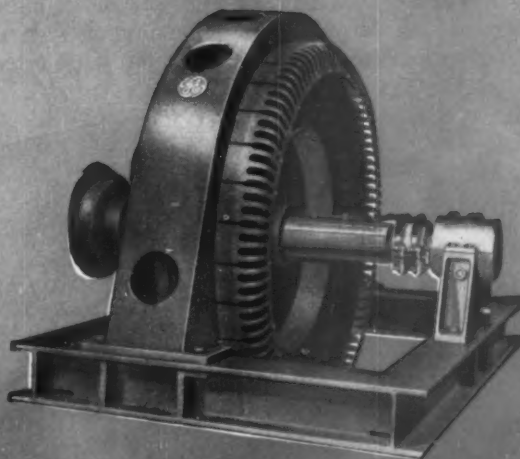
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WHATEVER YOUR SPECIFICATIONS, General Electric—a leader in motor research, design and engineering—can custom design a motor with an insulation system to meet your requirements. Large Motor & Generator Dept., General Electric Co., Schenectady, N. Y. 773-10



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BUSINESS WEEK • JUNE 27, 1959 • NUMBER 1556

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BUSINESS WEEK • June 27, 1959

READERS REPORT

One Acapulco Enough?

Dear Sir:

There are many prominent Mexican citizens, businessmen and retired immigrants in Mexico who are greatly disturbed over the proposed expansion of Puerto Vallarta, Mexico, into something resembling the Acapulco mad house. The story, Mexican Land Boom Lures Gringos [BW—Jun. 6'59, p44], portrays accurately the commercialization of the last remaining colonial village offering a place of quiet relaxation for the retired gentlemen and families of Mexico, on the Pacific Coast.

The Mexican government would be wise to preserve the Colonial atmosphere of Puerto Vallarta in a manner accomplished at Taxco so future construction would preserve the colonial atmosphere and a limit placed upon night clubs, large hotels, etc. I have observed the growth of Acapulco for 20 years and believe one Acapulco is enough for Mexico with the invasion of thousands of tourists who quite often I have observed are ill mannered and arrogant in a foreign country.

WARREN C. BURGESS
 ST. CHARLES, ILL.

Specialized Computing

Dear Sir:

I want to express my admiration for your article [BW—May 30'59, p64] on the effects of solid-state elements and other new technical developments on electronic data processing equipment. Your ability to explain the complex world of electronic computers in layman's language is one which I both admire and envy.

During the past 10 to 12 years we have built and delivered many tube general purpose computers. In the last year or so we have delivered solid-state special purpose data processing equipment. The contrast is indeed startling.

Based on our experience, I should like to express disagreement with one point made in your article. You state that traditionally business use has required simple computation. This is not only "traditionally" true but, if our experience is any indication, it continues to be characteristic of by far the largest percentage of business data activity.

It is quite possible that there are more business problems today

CARING FOR WAXED FLOORS IS...



*A cinch
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It waxes as it cleans!

REDUCES THE FREQUENCY OF REFINISHING

Sanax was developed to permit frequent cleaning of waxed floors without washing away the finish... and to eliminate waste in wax and labor. A neutral liquid soap with a wax base, Sanax not only quickly removes dirt, oil, and grease, but leaves a thin film of wax. In fact, regular use of Sanax to machine-scrub or damp-mop waxed floors actually prolongs the life of the finish, and thereby reduces refinishing costs on a year-to-year basis. Like all Finnell Fast-Acting Cleansers, Sanax is designed for the greater speed of machine-scrubbing, and works as effectively in a Combination Scrubber-Vac as in a Conventional Scrubber-Polisher. And because Sanax is processed from pure vegetable oils, it's safe for all floors.

Find out how you can simplify and reduce the cost of caring for waxed floors. There's a Finnell Floor Specialist nearby to help you choose the waxes and cleansers that are exactly right for your needs. Finnell manufactures a complete line, so you can depend on unbiased advice. In fact, Finnell makes everything for floor care!



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11, 13, 15, 18"



- A mild liquid wax-soap for machine-scrubbing or damp-mopping waxed floors
- Leaves a lustrous anti-skid protective finish
- Highly concentrated... economical to use

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FINNELL SYSTEM, INC.

Originators of
Power Scrubbing and Polishing Machines



BRANCHES
IN ALL
PRINCIPAL
CITIES

which need elaborate computation than was true in the past; however it cannot be inferred from this that expensive, high-powered, general purpose computers are the chief requirement for business. If a new push is on to supply business with solid-state "scientific processors hitched to business input-output systems," then by and large many businesses will continue the trend of paying far more than is required by their needs. . . .

ALBERT A. AUERBACH

PRESIDENT

DIGITRONICS CORP.

ALBERTSON, N. Y.

Hearing Response

Dear Sir:

The American Hearing Society is grateful to BUSINESS WEEK for the Personal Business article [BW—May23'59,p163].

. . . You will be interested to know that your article on hearing brought prompt response from the "hard-driving executives" and businessmen to whom it was directed.

CRAYTON WALKER

EXECUTIVE DIRECTOR

AMERICAN HEARING SOCIETY

WASHINGTON, D. C.

Wrong Owners

Dear Sir:

There appears a misstatement of fact in the Finance Pattern [BW—May23'59,p98]. . . .

The discussion to which reference is made is a review of Robert Tilove's recent publication entitled Pension Funds and Economic Freedom. At the bottom of the first column of the page in question, you state "For example, two employee profit-sharing trusts of Textron own control of Cleveland Pneumatic Industries, Inc." . . .

The ownership of this company rests exclusively in two profit-sharing trusts established by the company for the benefit of its own employees. Neither Textron, Inc. nor any pension trust established by that corporation owns any part of this company. . . .

O. ASHLEY

VICE-PRESIDENT

CLEVELAND PNEUMATIC

INDUSTRIES, INC.

CLEVELAND, OHIO

• Reader Ashley is right. A Textron employee pension trust did own Cleveland Pneumatic stock but sold its interest to the two Cleveland Pneumatic profit-sharing trusts.



M/V United States—most powerful towboat ever built to operate on inland waters.

Super towboat opens new era of river hauling

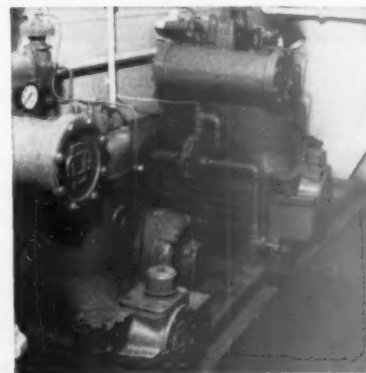
Hailed as the forerunner of a whole new class of high-powered river craft, the new *United States* towboat—largest and most powerful of its kind—is starting to make towing history.

Built by the St. Louis Shipbuilding and Steel Company for Federal Barge Lines, Inc., the *United States* can push a $\frac{1}{2}$ -mile-long tow of 40 barges carrying 40,000 tons of cargo—equivalent to the capacity of ten freight trains of 100 cars each.

From its four diesel propulsion engines, developing 8500 hp, to its elegant, wood-paneled officers'

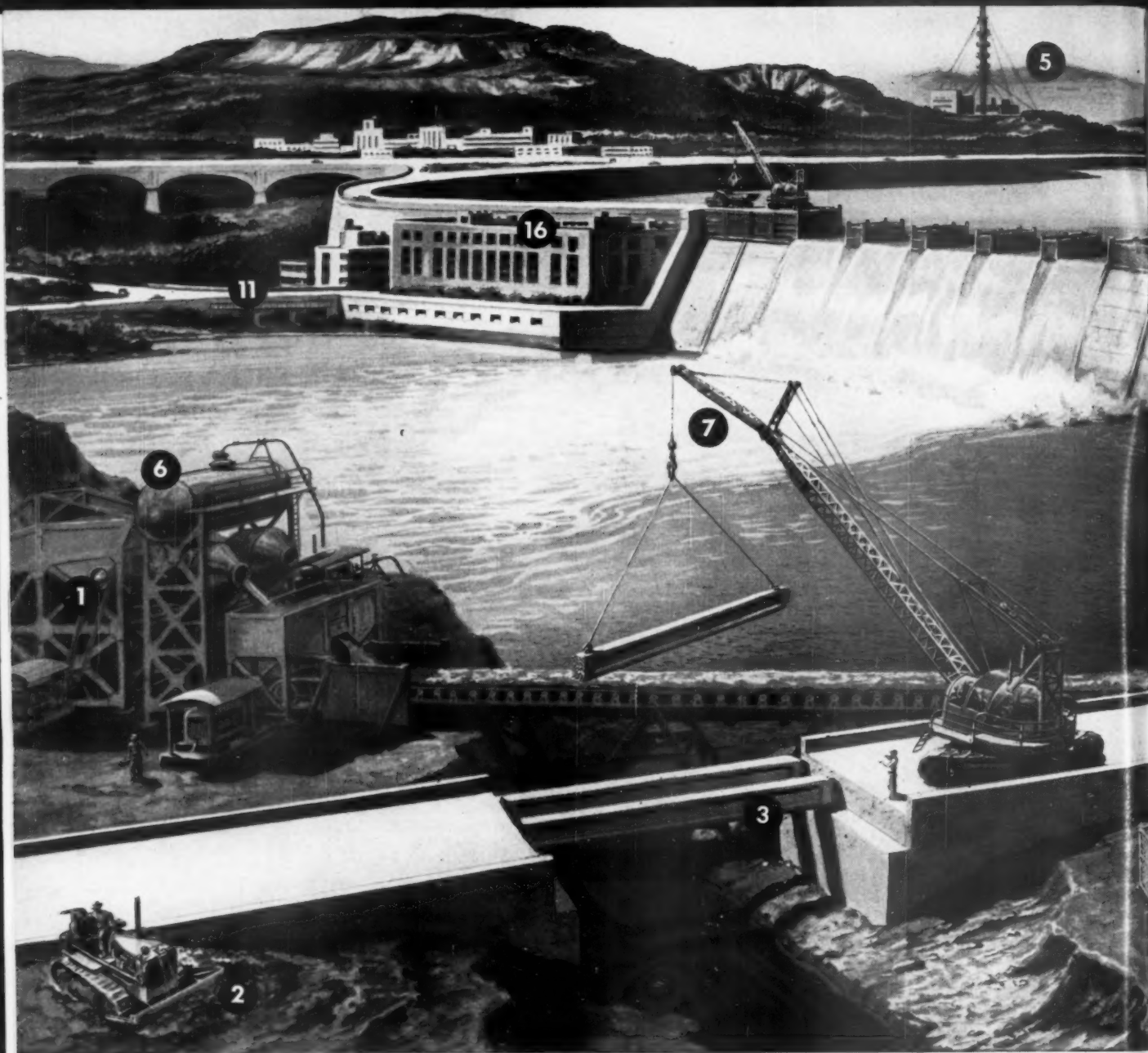
lounge, the quadruple-screw *United States* is a towboat builder's dream. Two Gardner-Denver AB air compressors provide compressed air for starting the four giant engines. Compressors are equipped with Gardner-Denver centrifugal pumps for circulating cooling water. Compressed air controls the main engines and also blows the whistle!

Gardner-Denver—now celebrating its 100th anniversary—is proud of the fact that its products are so often a part of the world's "famous firsts." Gardner-Denver Company, Quincy, Illinois.



EQUIPMENT TODAY FOR THE CHALLENGE OF TOMORROW

GARDNER - DENVER



***On major construction projects
... you'll see many***
CF& STEEL PRODUCTS



A modern dam is a marvel of engineering and construction skill, and an essential structure in our present-day economy. Man's ingenuity puts many types of material and equipment to use in the building of dams—with *steel* playing a vital role. Products made of steel do the earth-moving, lifting, hauling and erection jobs . . . steel is the backbone of the dam itself . . . and auxiliary equipment and structures are largely made of steel. For these myriad uses, contractors demand *dependable* steel products.

That's why—on dam projects and other construction sites—you'll see many different CF&I Steel Products. They *are* dependable because CF&I makes its own steel and performs every manufacturing step, building top performance into each product through rigid quality control procedures born of careful research and long experience.

If you use steel in any form, it will pay you to contact CF&I—a single source for many dependable steel products.

- | | |
|-------------------------------------------|----------------------------------------------|
| 1 Industrial Screens | 9 Nails and Spikes |
| 2 Cutting Edges | 10 Chain Link Fence |
| 3 Prestressed Concrete Strand and Wire | 11 Welded Steel Girders |
| 4 Welded Wire Concrete Reinforcing Fabric | 12 Carbon and Alloy Steel Plate |
| 5 Galvanized Steel Strand | 13 Springs |
| 6 Flanged and Dished Heads | 14 Insect Wire Screening |
| 7 Wire Rope and Slings | 15 Rails, Spikes, Track Bolts and Tie Plates |
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For confidential information about the numerous Northern California plant site locations on the lines of Western Pacific and its subsidiaries, get in touch with F. B. Stratton, Director, Industrial Development Department, Western Pacific Railroad, 526 Mission Street, San Francisco, California.

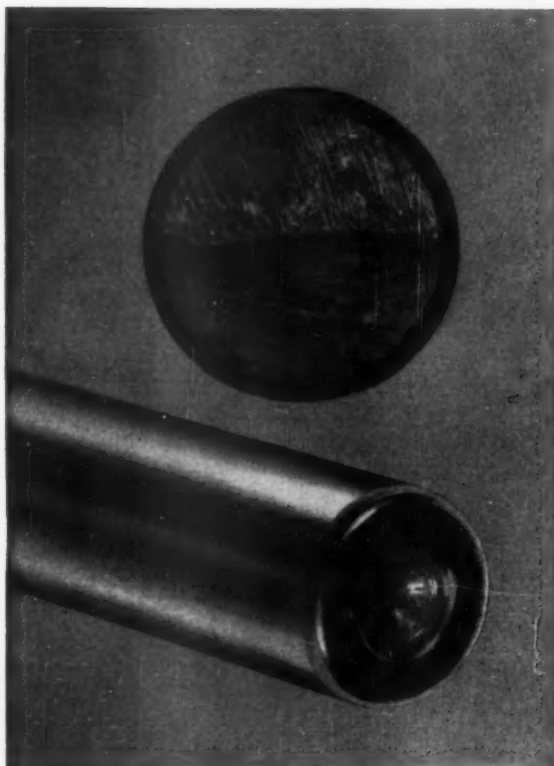


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ROUTE OF THE VISTA-DOME

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You benefit seven ways from Republic Steel Bar SERVICE IN DEPTH



COLD DRAWN CARBON CORRECTED BARS HELP BRIGGS & STRATTON BOOST PISTON PIN PRODUCTION. The company was experiencing production difficulties and was not satisfied with piston pin quality from a performance standpoint. On the advice of a Republic Field Metallurgist, Briggs & Stratton switched to Republic C-1050 Cold Drawn Carbon Corrected Bars. The results were immediate. Production increased substantially. Rejects dropped to a minimum. Pin quality maintained at the highest level. Other advantages of Cold Drawn Carbon Corrected Bars include: Better machinability. Savings in both metal and money by eliminating waste. No need to buy bars oversize to allow for decarb removal. Photo shows finished piston pin used in Briggs & Stratton 1¼ to 3 hp engines. Note induction hardening in cutaway view.

Steel bar service in depth is an exclusive Republic concept, designed to help you solve steel bar problems and to benefit you these seven ways:

1. Facilities—Republic bar mills are strategically located in relation to major use areas. Hot rolled mills at Cleveland, Youngstown, Buffalo, Massillon, Chicago, Canton, Gadsden; cold finished mills at Massillon, Hammond, Beaver Falls, Hartford, and Los Angeles.

2. Abilities—Republic's broad and specialized experience has been gained as the nation's number one producer of alloy and carbon bars, and leader in the production of special quality steels, such as forging bars.

3. Shapes and Sizes—Modern bar mills produce a complete range of sizes and materials—carbon, alloy, stainless, and titanium—in ¼" to 10" rounds, also squares, hexagons, octagons, flats, and special sections.

4. Variety—In addition to regular merchant quality, production includes coil spring and spring bar quality, cold heading and cold extrusion quality, high quality alloy and carbon steel bar products in heavier weight coils.

5. Quality—Republic combines quality control at every step of production with the most advanced features of bar mill design to meet today's exacting requirements for high quality steel bar products.

6. Dependability—Republic's aim has been to build capacity to provide more steel tonnage for existing customers as well as supply additional users. Assurances of steel to customers are real assurances. Orders are not taken by Republic unless capacity is available to fill them.

7. Metallurgical Service—Republic's famed 3-Dimension Metallurgical Service Teams—field, mill, and laboratory—are always available to help your personnel apply Republic's high quality bar products to your product. Carbon, alloy, stainless, and titanium metallurgists will assist in the selection, application, and processing of the right bar product for the job. No obligation. The coupon is your invitation to use this service.

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Send more information on:

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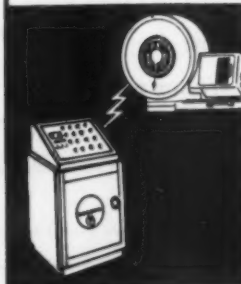
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Printweigh "400" can give wings to weight data... transmit it to remotely located adding or other office machines. Brings welcome flexibility to weighing operations!

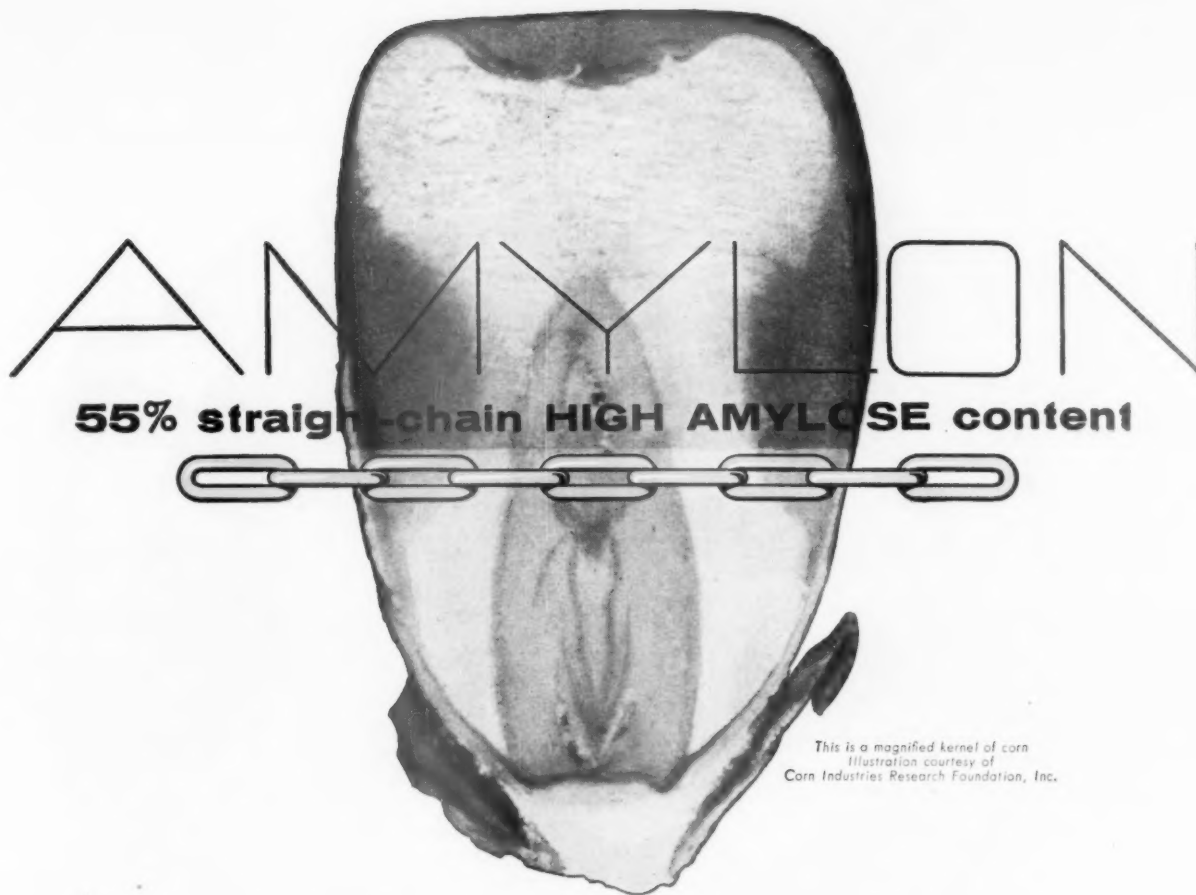
Human errors in reading, remembering and recording weights *are eliminated* with new Toledo Printweigh "400" . . . product of Toledo's advanced research and development programs to improve weighing efficiency.

Printweigh "400" provides *complete* printed weight records on materials received, processed, transferred or shipped. It's applicable to the full range of Toledo dial scales . . . offers a wide choice of optional features, including a "memory" for printing weight data even after the load is removed.

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This is a magnified kernel of corn
Illustration courtesy of
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A RADICAL GENETIC CHANGE science and nature synthesize a new chemical polymer

NOW AVAILABLE in semi-commercial quantities. A radically altered natural starch polymer that contains 50-55% amylose—the straight-chain molecular component of starch.

This is the first major genetic advance leading to a potentially feasible starch containing 100% amylose. It's an exciting genetic achievement. Until now, the amylose content commonly available never exceeded 27%.

Geneticists have worked for many decades to develop special qualities in hybrid corn. Such as high yield, drought and insect resistance. A change in chemical structure was first accomplished industrially by the breeding of corn containing 100% amylopectin which NATIONAL introduced as AMIOCA in 1943. High amylose corn represents another major industrial accomplishment in the new area of plant breeding intended to alter the polymer structure of the starch itself which NATIONAL is introducing as AMYLON®.

Milled from high amylose corn in the same way as ordinary starch, AMYLON represents a marked step towards the unusual properties of amylose itself: Film formations, with greater strength than ordinary starch films. With improved water, grease and oil resistance. Flexibility. Unusually strong gels. Adhesiveness.

To the inquiring mind, these unusual properties suggest a variety of applications: Soluble and digestible packages for instant coffee, meats, vegetables, fish, fruit. Butter. Vegetable shortenings. Soluble packages for soap powders and insecticides. Grease and oil resistant coatings. Water and humidity resistant binders. Improved textile sizes and finishes, etc.

An invitation is extended to all who are interested in exploring the properties of this new high amylose starch.

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in stock at RYERSON
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In spite of heavy demand, we are currently able to meet most steel requirements. And in a period such as this, as always you can count on Ryerson to maintain its regular policy of fair prices and to furnish steel that is always of high, uniform quality.

As this is written, we can only hope that mill production will not be halted by a strike. But if a strike does develop, we are confident that our large and diversified stocks will enable us to serve more of our customers better—and for a longer time—than in any comparable period in the past.

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CARBON STEEL BARS—Hot rolled and cold finished—round, square, hexagon, flat, etc.

STRUCTURALS—Channels, angles, beams, etc.

PLATES—Forming and welding, flange and firebox qualities, high carbon, E-Z-Cut, etc.

SHEETS & STRIP—More than 20 types

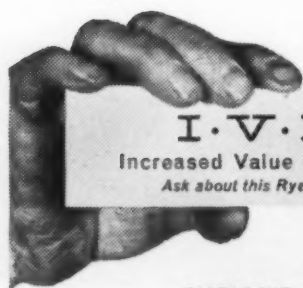
TUBING—Seamless and welded mechanical, hydraulic cylinder and fluid line, structural, etc.

STAINLESS STEEL—Sheets, plates, bars, tubing, pipe and fittings. 15 types, standard and aircraft qualities.

ALLOY STEEL—Case hardening, direct hardening and heat treated, Rycut leaded alloys, aircraft quality alloys, etc.

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BUSINESS OUTLOOK

BUSINESS WEEK
JUNE 27, 1959



Metalworking industries this week moved toward their period of annual vacations with **one common anxiety: steel.**

They could hope that steelworkers would be on the job past the contract expiration as was rumored at midweek. They knew, too, that the vacations themselves would eke out supplies by a week or two.

But they could hardly rest easy. Even a pact reached without a strike, they felt, would implicitly favor a **wage-cost-price push.**

Calculations that steel users have, over-all, a stock of metal good for six to eight weeks console only those who are well fixed.

The plant that hasn't that much derives scant comfort from the relatively favorable position of others (particularly competitors).

Then, too, even those with the best-filled stockrooms would face a new **inventory scramble in the event of a long, bitter strike.**

Steelmen, for their own part, were too tied up in the negotiations to ponder greatly **what would happen should the strike be averted.**

They've booked a lot of July and August business. This looks, on its face, as though many customers need and want steel if it can possibly be produced. Yet it is realized that **these customers may just be reserving a place at the head of the line for post-strike consideration; they may be in no hurry for delivery if the strike doesn't come off.**

Steel mills will, of course, carry forward a good bit of business booked for June delivery on which work could not be finished.

But here, too, the pressures will lessen. Much of the steel was ordered as strike insurance. Without a strike, there's a good deal of doubt that customers would press for speedy fulfillment.

Whatever comes, mills are pouring steel right up to the deadline.

Output this week is scheduled at 2,625,000 tons—only a very little less than was turned out in the very best weeks earlier this year.

Perhaps that schedule won't be met, though. **Wildcat strikes, customary in the late stages of wage talks, plagued several mills.**

Actual output of raw steel during June regardless of hot spells and wildcat walkouts, will come to almost exactly 11-million tons.

That's a very big month and fully a million tons better than most observers had expected even a few weeks back; they then felt that the industry would taper off output of raw steel as it rolled and shaped finished products from ingots already poured.

It didn't work out that way and June is **pushing the second quarter to a new record for any three-month period.** The quarter shapes up at 33.9-million tons, nearly 1½-million better than the previous peak.

This quarter's record-breaking production, interestingly enough, has been achieved at an average operating rate of 92½% of capacity. The previous top, set in the last quarter of 1956 when capacity was substantially smaller, required operations a shade over 100%.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

JUNE 27, 1959

Aluminum, like steel, has been setting one record after another.

May was the biggest month on record with 164,000 tons. Thus it became the fifth month of the last six to post a new high on a daily average basis. Moreover, second-quarter tonnage will be a record 475,000, eclipsing the first quarter's new high of 456,000.

And that's not the end of it. Kaiser Aluminum announced plans on Wednesday to **expand output** by activating another potline. Earlier, Anaconda had announced plans to increase its output by mid-July.

Buying of aluminum looks more like **an effort to get in ahead of expected price increases** than to beat a strike.

One wage contract in aluminum has already been signed (although it doesn't bind the big three—Alcoa, Reynolds, and Kaiser—whose settlement usually follows the lines set in steel).

The overriding fact is that aluminum producers, unhappy over prices for a good while, hope to boost the price in any case.

—•—

Some tapering off in demand for copper—visible for several weeks in price uneasiness—should come as no surprise.

There has been a growing impression for some time that miners might let their wage demands ride to see what happened in steel. This week, their leaders gave virtual assurance that this was the case.

And users of the red metal have **piled up record inventories**. End-of-May figures show fabricators with 475,000 tons on hand. That's up 11,000 in a month and 75,000 above last year's low.

Present copper stocks represent about 3½ months' needs.

—•—

Everyone seems to take it for granted that the auto industry will be able to **ride out its model year without much worry about labor developments in metals**—and go on into the new one, for that matter.

This is partly due to the **large supplies of raw materials** the auto companies are known to have on hand. But it also arises, more conspicuously, from **record stocks of new cars in dealers' hands**.

Production of autos in May and June has been kept closely in step with **dealers' sales**. That, however, implies only an intention to keep stocks from rising; output will be cut far below sales once the cleanup starts.

Now the word comes out that the **manufacturers will turn out a million or more cars, mostly 1959s, in the third quarter**. On that basis dealers won't be running short of cars to sell any time between now and the early weeks in October.

Add up the figures and you begin to see just **how much better an auto year this is turning out to be than 1958**:

For the nine months through Sept. 30, output apparently will be 4.3-million against 2,873,000 in the same period last year. Retail deliveries aren't up any such percentage but gains are widening steadily; that, plus interest in new models, keeps stepping up final 1959 estimates.

How
Pittsburgh Coke
Serves
America's Basic
Industries



This Summer They're Cooling with Gas!

THE LUCKY FOLKS who live in this home are keeping cool and comfortable with safe, reliable, low-cost *gas* air conditioning.

Summer or winter, their gas supply is safe from service interruptions due to bad weather because it's transported from well-to-home by underground pipelines. Corrosion *could* destroy these lines, but it doesn't because most of them are protected with a tough, impervious "skin" of coal tar coatings. Today, gas and oil lines from coast to coast are protected with "*Pitt Chem*" coal tar coatings, products of Pittsburgh Coke & Chemical Company's Protective Coatings Division.

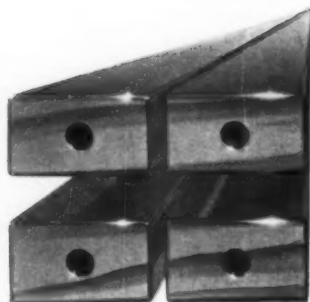
In addition to pipeline coatings Pitt Chem stands for a complete family of versatile corrosion fighters. This family includes *Tarset*, the unique coal tar-epoxy resin coating that has solved many of the "impossible" corrosion problems in the marine, petroleum and chemical industries. It also includes *Tarmastic* heavy-duty coal tar coatings and *Insul-Mastic* Gilsonite mastics, which set the industry's standard for economical moisture-barrier coatings.

If you have a stubborn corrosion problem, there's a good chance a Pitt Chem protective coating can solve it. Write for more information from Pittsburgh Coke, a basic and integrated producer.

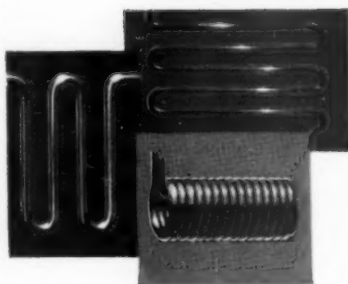


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Copper Extrusions



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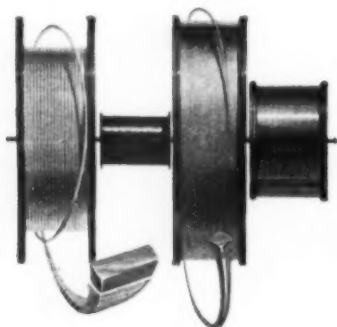
Building Wire and Cable



High Frequency Cable



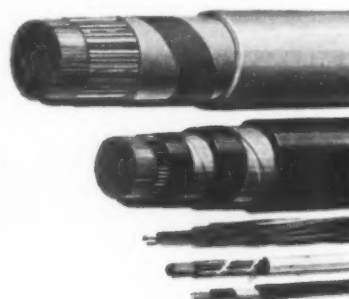
Condenser and Heat Exchanger Tube



Magnet Wire



Copper Water Tube



Telephone Wire and Cable

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FIRST FOR LASTING QUALITY—FROM MINE TO MARKET



It's the Consumer's Play Now

Ordinarily, the American consumer is a rather stable element in the economy. Economists sometimes think of him as a machine for spending, set to give out at a rate of about 93% of the income fed into him by business or government. He doesn't usually initiate major upswings or downswings in overall business; he's more done to than doing.

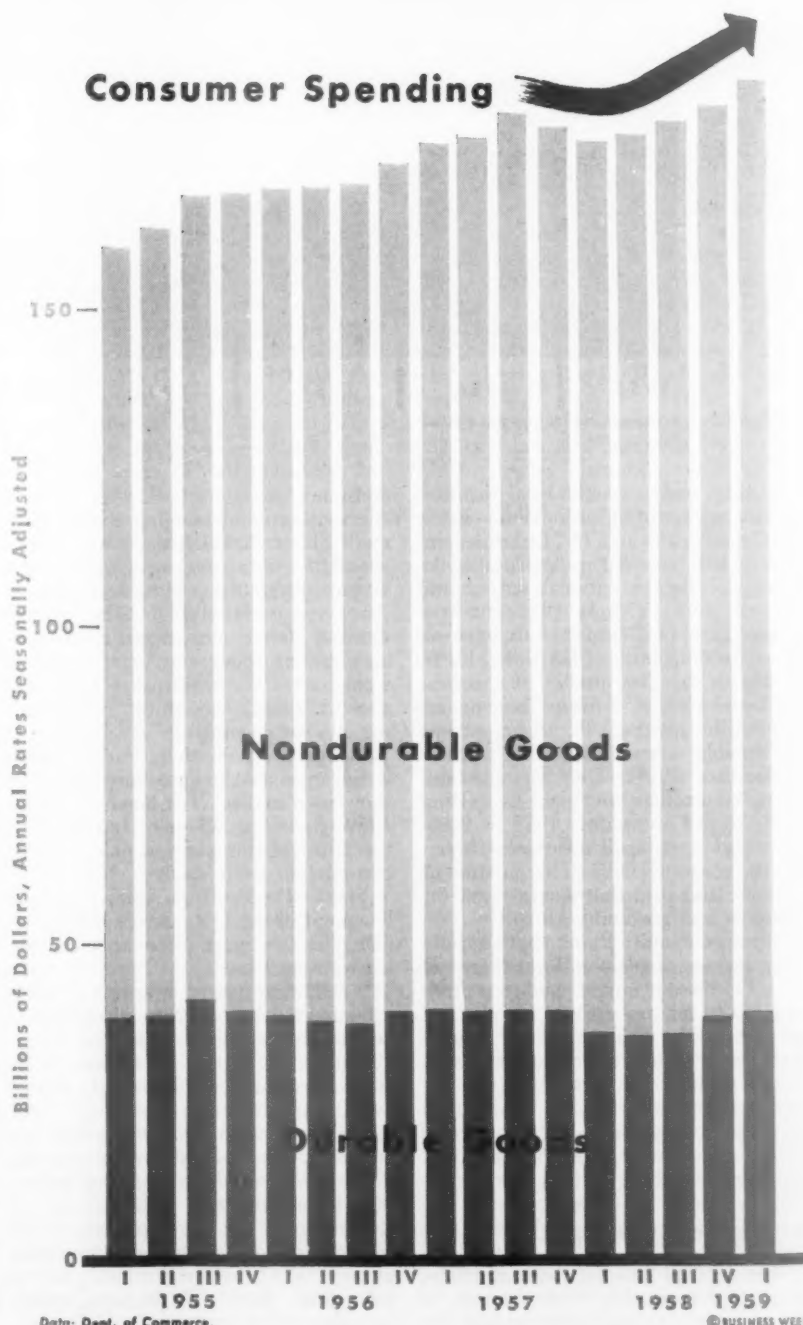
But there have been times when this seeming automaton has burst from his cell, has asserted his independence as an economic factor, and has started to throw his weight around in a way to make the economy tremble.

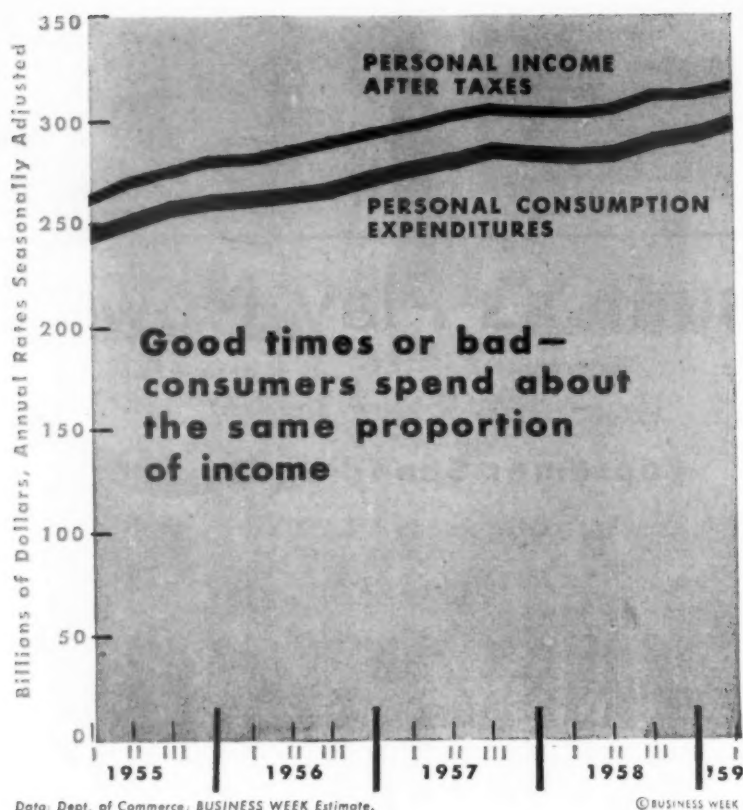
• **Spending Power**—For his weight is enormous: Of all spending done by everyone—government, big and small business, agriculture, and individuals—in a year, personal consumption accounts for two-thirds. That's more than \$305-billion worth of goods and services at the present \$477-billion rate of gross national product. A 1% shift in what the consumer decides to do with his money means \$3-billion taken away from some industries and given to others. And if he decides to cut his savings, the \$3-billion is added to the total stream of dollars flowing to business.

The most notable instance of the consumer's power to initiate change came in 1955 when the consumer's unexpected fervor—especially for that year's automobile models—launched the postwar boom on its most fantastic phase. That year, the consumer's \$18-billion boost in spending, made possible by a cut in his rate of saving and a boost in his installment borrowing, triggered the wave of inventory-building and capital spending that culminated in the recession of 1957-58.

• **Shifting Weight**—Since that spectacular performance in 1955, as you can see from the chart at right, the consumer has not been on any spending spree, but he has made his weight felt in another way. His total spending on goods has gradually advanced, as his income rose, except for the halt for three quarters during the 1957-58 recession.

All of this rise in spending was on nondurables—food and drink, gas and





oil, drugs and cosmetics, and the like. Consumer spending on durables—autos, appliances, radio and TV, furniture, and so on—has been flat as a pancake, despite the rise in national output and income since 1955. In 1955, the consumer gave 14.4% of his after-tax income for durables; in 1958, only 11.8%.

But in the first quarter of this year he was clearly shifting his money around—he spent 12.5% of his income for durables.

• **Another 1955?**—The big question, then, is whether the giant is getting ready to put on another 1955 performance that could spell inflationary boom for the economy, with all the mixture of pleasure and pain that would mean for business and government.

Some economists think that's exactly what is going to happen. But others feel that 1955 was a unique case—the product of tax cuts, excessively easy money policies of the Federal Reserve, and a great lengthening in terms for credit. Those factors, they argue, won't be repeated again. Indeed, some doubt that consumer spending will be strong enough this time to keep the economy moving forward.

I. Man on the Spot

The Federal Reserve Bank of Philadelphia warned this week against "a tendency to over-emphasize the role the

consumer played in seeing us through the recession and bringing about recovery." The Philadelphia Fed grimly noted that, if expansion is going to continue, "private demand now is going to have to assert itself." The bank's monthly letter refused to make easy assumptions about what the consumer would do. "By enshrining the consumer," it said, "we inhibit understanding of what is going on."

For good or evil, then, the consumer is the man on the spot, now that the showdown in steel is at hand and fiscal 1959 is winding up—two landmarks of the finish of the recovery phase of the current business cycle.

• **Spent Forces**—From the recession low-point in the first quarter of 1958 to date, the two great forces that propelled recovery were:

• The swing in inventories from a liquidation rate of more than \$8-billion to an accumulation rate of about \$8-billion in the current quarter, with extra steam coming from the anticipated steel strike.

• The climb in government expenditures and the fall in tax receipts that together produced a record peacetime deficit of about \$12.5-billion.

From now on the economy won't be getting its big push from those two sources. What income-generating forces will replace them? To be sure, capital spending, aided by heavy cash flow re-

sulting from rising profits and depreciation allowances, is pushing upward. It will help to replace the forces that are losing their potency. But capital spending can't go all the way back to 1956 or 1957 levels without the support of rising consumer demand. That's needed to carry producers up to and beyond their preferred operating rates.

II. Consumer Inclinations

So what can you expect the consumer to do? Nobody has yet figured out a surefire way of psychoanalyzing this biggest and most mysterious element in the economy and of predicting what he will do. But when you take a close look at what is happening, as BUSINESS WEEK reporters and editors did this week, you come away with the conviction that consumer spending is strong and getting stronger, that past caution is giving way to real confidence and enthusiasm.

Here are the main reasons for expecting consumer spending to go on rising at a healthy clip:

Personal incomes are still rising. Earlier this year, the rounds of wage settlement and the rise in employment kept income climbing, and it appears probable that the second half of 1959 will see more of the same. Personal income (before taxes) in December, 1958, totaled just under \$360-billion. Since then, it has been rising at a rate of more than \$3-billion a month, reaching \$376.2-billion in May.

Consumption (chart, this page) has nicely paralleled income rises in the past, and will do at least that well in the period ahead. But it's a mistake to think of the chain of causation as running simply from income to consumption. For if people spend, or borrow to step up their rate of spending on durables, that becomes increased income to other people, building up the national total. So, even if the relations between income and consumption look just about as they previously did, the statistics conceal a special shove the economy got from rising consumption.

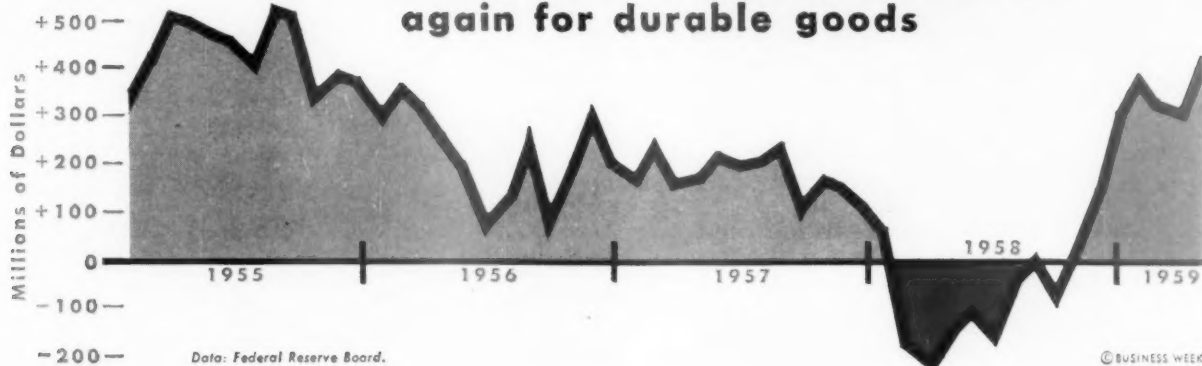
Consumers are showing increasing willingness to go into debt (chart, facing page). Again, you can never be quite sure which is tail, which is dog. (Curiously enough, most economists appear to think of income as dog, consumption as tail but of spending on durables as dog and of consumer borrowing as tail.) In any case, if the new cars help stimulate consumer appetites for autos, consumer credit will grow still faster.

III. Auto Prospects

The auto outlook appears increasingly favorable. In recent weeks, new domestic car sales have been running at a seasonally adjusted annual rate of 6.1

Net Change in
Installment Credit

Debt repayment is over— Consumers are going into hock again for durable goods



million units. At the same time, stocks of used cars have dropped to low levels. A major auto finance organization estimates that dealers hold only a 28-day inventory of used cars, and prices of used cars have risen an estimated 20% over last year.

These developments may well mean a sharply improved market for new cars—both because of the higher trade-in value of old cars and because of the difficulty in buying the used car you want. Some auto men are now talking about a 6.8-million domestic car sales year in 1960—with an extra 500,000 foreign cars on top of that.

• **New Competition**—Some industry men and observers still think those figures too high. They fear that the new Big Three compact cars will take business away partly from foreign producers, partly from Rambler and Studebaker, and partly from big domestic cars.

The foreign and domestic car producers who already have their small cars on the market will obviously be fighting hard to hold position. This ought to jazz up the market, make 1960 a real rough-and-tumble year for the auto dealers and manufacturers.

IV. Spreading the Spending

But a healthy consumption year doesn't depend only on autos, or any other single product or two. Fred Lazarus, Jr., chairman of Federated Department Stores, Inc., generalizes that the upsurge in consumer expenditures is fairly well across the board.

"What's different about this upsurge and the last [1955]," says Lazarus, "is that consumers are spreading their purchases instead of concentrating an abnormal amount in automobiles." Department store sales, he notes, "have shared, with increases in both their durable and nondurable classifications."

• **Best Sellers**—In the aggregate, department store sales have been climbing

month by month. In May, according to the Commerce Dept., they hit a seasonally adjusted level of \$18.2-billion—up almost 5% from the seasonally adjusted January, 1959, figure and up more than 10% from last May. Like Federated, other big outfits that sell nationally find best selling goods all through the list of what they sell.

Montgomery Ward finds home furnishings, white goods, tires, batteries, paint, hardware, and things for lawns and gardens particularly strong. Sears finds that sales of softgoods are improved, notes that the price line has held well and that the new "miracle fabrics," wash-and-wear, and styling have helped boost sales. Sears is paying special attention to teenagers, particularly in softgoods. It's even experimenting with teenage credit in its Atlanta stores.

In New York, one big store finds that "gimmicks" are finally helping to move big appliances—such as frost-free refrigerators. Another says people are finally convinced that automatic driers are worth buying.

• **Flexible Tastes**—The real-world consumer, as he appears today to the people who sell to him, emerges as anything but an automated device for recirculating a roughly constant proportion of income. On the contrary, he has been shifting his tastes and dollars radically as population, national culture, and per capita income change.

You get some fresh light on these shifts, and their impact on consumer buying, from a Sears, Roebuck officer who recently reported on 10-year changes in his company's sales of specific products:

Due to movement away from cities, garden tool sales have gone up 163% and power mowers 593%. A lot of suburbs don't have sidewalks, and tricycles have decreased 35%; roller skates, though, are even. Reflecting changes in the makeup of the popula-

tion, sales of wedding rings have gone up 231%, boys' dress shirts 300%, wheel chairs 180%, hearing aids 300%, and playground equipment 212%.

Leisure-creating merchandise: automatic laundry equipment sales up 242%; gas furnaces, up 206%; home freezers, up 72%. Coal and wood stove sales, meanwhile, have gone down 72%; home canning and bottling equipment, down 74%.

Merchandise to "utilize free time"—sales of boats and accessories went up 720%; picnic supplies, up 313%. Women's sportswear sales increased 414%. (But women's hosiery sales increased only 12%.)

• **Shifts Continue**—These shifts will go on—and so will the shifts by consumers in how they plan to allocate their dollars between durable and non-durable goods.

The recent rise in the proportion that's going for durables bears out what has happened in the past—that the share of after-tax income going for durables tends to rise in periods of recovery and prosperity, to fall in recessions.

At the moment, the share for durable goods is up to 12.5%. If it goes farther in the same direction—toward 1955's 14.4%—this would quash fears that the consumer may not take over where business inventory-building and government spending are leaving off.

There's no way to predict that shift—until consumers make up their own minds to do it.

However, even without a radical shift toward durables, the steady climb of consumption over the coming year looks strong enough to bring industry after industry into a position where they will be operating above their preferred rate. There's no sign that the recovery is about to fall on its face either because the pre-strike steel buildup is over or because the government is getting the budget back under control.



PLEASURE ISLAND, newest in chain of "family recreation centers" brings Wild West train, mules to Boston.



CORPORATE promotion is one key to growth of parks. Here girls bake bread, promoting Pepperidge Farms.



ENTERTAINMENT, like Pleasure Island's whaleboat ride, draws customers who provide most of revenue, and business leases add more.

Even Boston Goes for Fantasy

Following trend started by Disneyland, Boston's Pleasure Island combines make-believe, history, corporate promotion.

In Boston they say "When Boston does it, it must be right." And now staid old Boston has its own "family recreation center"—the mid-century version of the old amusement park of funfair—thus setting the seal of approval on an offbeat business that has been spreading rapidly ever since Disneyland, a 55-acre tract of fantasy carved out of the real world, opened outside Los Angeles four years ago.

Boston's park, Pleasure Island, opened this week. Part amusement park, part shopping center, part exhibition hall, it is typical of the trend started by Disneyland. It replaces the carnival atmosphere of the old amusement park with history, fantasy—and corporate advertising.

• **Quick Return**—For its backers it promises to be a bonanza. The owners contemplate a gross of \$24-million this

season, about as much as their cash outlay to build the place.

Not all the gross comes from the gate; almost 10% comes from lessees, among them Pepsi-Cola Co., Swift & Co., H. P. Hood & Sons (milk and ice cream), F. H. Snow Canning Co. (clam broth), and Friend Bros., Inc. (baked beans). Maintaining less gastronomic displays are such companies as Hotel Corp. of America and Merchants National Bank of Boston.

Owing to the locale—a partly reclaimed swamp—the feature ride at Pleasure Island is a whaleboat pursuit of a Hollywood-fabricated Moby Dick. In the Wild West section children may pan tiny nuggets of gold, which they can later exchange at the Merchants' Bank for 15¢ each.

• **False Start**—Pleasure Island's history goes back to an early visit to Disneyland by William S. Hawkes, publisher of Child Life Magazine. He wanted to set up something similar in the East, spent three years making feasibility studies. When the project was ready, he took it to the Boston industrial real estate firm of Cabot, Cabot & Forbes—who

promptly turned it down. Robert C. Linnell, CC&F executive vice-president, recalls, "The whole thing was so foreign to us, and we were so swamped with other things that the line of least resistance was to say 'No.'"

"That was on a Thursday," he adds. "That weekend I was driving in upstate New York when I happened on two parks that were just the sort I had turned down, only smaller and more amateurish. When I saw how popular they were and how much money they were making, I got excited. Monday morning I called Hawkes and said 'Yes.'"

• **Owners' Plans**—Pleasure Island was built on the back acreage of one of the numerous industrial park lots CC&F has assembled along route 128, Boston's circumferential highway.

Among the park's owners are Hawkes, CC&F, and Breck's of Boston (a seed and garden equipment store). Its designer was Marco Engineering Co., whose president, C. V. Wood, was formerly vice-president and general manager of Disneyland. Wood has branched out on his own, has made



Texaco Gets Itself More Oil

In one of the biggest such deals of recent years, Texaco buys Superior Oil Co., a producer of crude in U.S. and Venezuela, for an estimated \$765-million worth of stock.

At the moment, Texaco, Inc., is something of a paradox in the oil industry. The industry in general has been having trouble selling all its crude production, but Texaco's crude output has been less than the company considers proper for its refinery requirements.

To help solve the supply problem, Texaco in 1956 bought Trinidad Oil Co., Ltd., for \$108-million. Last year, Texaco acquired Seaboard Oil Co. for 3.7-million shares of stock—one-third of which went right back into Texaco's treasury in return for the interest it already had in Seaboard.

Last week Texaco disclosed one of the largest industrial acquisitions of recent years. The company announced it had "reached an understanding in principle" to buy Superior Oil Co. for some 10.1-million shares of Texaco—24 for each share of Superior. At Texaco's closing price on the day the deal was announced, that amounted to more than \$765-million.

• **Production Only**—Superior would bring Texaco no refining facilities whatever; it concentrates on production. But its crude oil and natural gas properties—located principally in California, Louisiana, Texas, Oklahoma, and Illinois—yield about 1.5% of the national totals of these products. It also holds leases in Venezuela, where it began drilling in July, 1957. Superior thinks the Venezuelan holdings will probably become its most profitable single concession. Last year, it figured reserves at 277-million bbl. of oil and 2.7-trillion cu. ft. of natural gas—excluding the Venezuelan property.

On \$110-million worth of business in its last fiscal year, Superior made a profit of \$16.55-million. Those earnings were down some 15% from 1957, but the company made almost as much money in the first half of the fiscal year that began last Aug. 31 as it did all the previous year.

Superior has long been the personal baby of Chmn. William M. Keck, now in his 70s. With the rest of his family, he owns just over 51% of the company's stock. Superior has paid nominal dividends—last year's was \$3, or 1/13th of earnings—but, at \$1,720 each, it has the highest-priced shares on the New York Stock Exchange.

• **Advantages**—From both companies' points of view, the U.S. import quotas on crude oil are a factor in the sale. The

quotas are based on refining capacity, and Superior, with no refineries, can bring its Venezuelan production into this country only by selling it to someone with capacity. But this is difficult to do: If a domestic refiner buys crude from Superior, he can import just that much less of his own overseas output. Superior considered building its own refinery but figured doing so would cost a minimum of \$50-million.

For Texaco, the acquisition fits in with the Trinidad and Seaboard deals to make it less dependent on Eastern Hemisphere production. Last year, Texaco's output in Saudi Arabia, Sumatra, Iran, Bahrain, and New Guinea made up more than 40% of its 1.1-million bbl. per day average. Superior's production averaged 75,000 bbl. per day.

• **Fine Print**—The two companies have yet to agree on the fine print in the deal. They have reached accord only on the fact of the acquisition and on the 24-for-1 exchange ratio. But Superior will be dissolved as a company and its operations divided between Texaco's domestic and foreign-Western Hemisphere divisions.

A team of top Texaco officials, headed by a top officer, arrived at Superior headquarters in Los Angeles at mid-week to begin working out other details. The actual acquisition isn't likely to take place before September; the talks might drag on until yearend.

• **Family Interest**—Among the points to be decided is the representation to be given the Kecks at Texaco. Though the general expectation is that they won't become officers of the company, they may well win at least one directorship. The family will own something like 8% of Texaco's outstanding stock—probably the largest single block.

As one West Coast observer put it, "people who know the industry and the Kecks doubt that they will be content to take a subsidiary role in Texaco's activities." William Keck's son Howard, president of Superior since 1953, may go into some independent oil venture. That's what his brother, William, Jr., did when he quietly left Superior's presidency—and the company—back in 1953. Howard Keck was involved in the \$2,500 contribution to Sen. Francis Case (R-S.D.) that was allegedly made to influence Case's vote on a natural gas bill. The bill was later vetoed by Pres. Eisenhower because of the pressures exerted (BW—Apr. 14 '56, p123).

studies and preliminary designs for parks near nine or 10 other cities.

Recently Wood, Linnell, Gerald W. Blakeley, president of CC&F, Peter DeMet, producer of television's "All Star Golf," and Herbert C. Lee, vice-president of Shoe Corp. of America, formed International Recreation Corp. The new company's initial goal is to build two parks: Freedomland in New York City (scheduled to open in June, 1960), and Discoveryland in Miami. Later it hopes to build parks in other major U.S. and foreign cities. In these, it plans to get more of the gross by signing up more national companies.

• **Spreading Idea**—Later this summer Denver will have its park, called Magic Mountain and set 12 miles outside the city. In mid-1960, Dallas' Great Southwestland park will open.

Both are the work of Marco Engineering, and are owned by local investors. In both there'll be the same dependence on corporate advertising for an important part of the gross.

Way out West where it all started, Disneyland grows bigger year by year. Total attendance since mid-1955 passed 15-million last month. And to keep the customers coming back another \$6-million worth of exhibits has been installed, bringing total investment in the park to \$29.6-million.

Berlin Hopes Survive Geneva

Despite the failure of East and West to agree during the first phase of the foreign ministers' talks, the Administration thinks compromise over the Berlin issue is still possible.

As the Geneva foreign ministers' conference began a three-week recess this week, a fateful question remained unanswered: "Will there be compromise or a new crisis over Berlin? The alternatives were placed clearly before the nation Tuesday by Christian A. Herter, back from his first diplomatic duel with the Soviets as Secretary of State.

The Soviet threat to Berlin is as obvious now as it was last November, when Premier Khrushchev first made it. The area of possible agreement mapped at Geneva is less apparent, but it's there. In fact, U.S. officials returning from the conference still are betting the eventual outcome will be a compromise, not a showdown. These officials will admit, though, that the tough Russian tactics at Geneva mean the bargaining will be longer and harder than they had expected six weeks ago when the conference began. And they fear any solution will be provisional at best.

Of course, Geneva has also dimmed the prospects for an early summit conference.

- **Herter's Words**—In his address to the nation, Herter gave both the dark and bright sides.

- **Negatively**, this is what he reported: "The Soviets gave no indication of being interested in genuine negotiation. . . . If the Soviet Union persists in its determination to add 2-million free West Berliners to the captive peoples of Eastern Europe, then no agreement is possible. . . . You may be sure that we will stand by people who stand by themselves."

- **Positively**, he pointed out: "The conference revealed possible areas of agreement concerning specific arrangements for Berlin. I believe that it may be possible to build on these areas of agreement if the Soviet Union is prepared to accept the continued existence of a free West Berlin under Western protection. . . . This is the critical question."

- **Khrushchev's Threat**—In his original ultimatum, Khrushchev demanded that the West leave Berlin within six months. To enforce the demand, he threatened to sign a separate peace treaty with Communist East Germany and give the East Germans control over the West's access routes to the divided city.

At Geneva, the West flatly rejected

Khrushchev's demands. But it did offer several concessions—a freeze and possible cut of Western forces in West Berlin, a reduction in cold war activities on a reciprocal basis, acceptance of East German supervision of access. The West insisted, though, that Moscow recognize its rights in Berlin were to last indefinitely.

In the end, Soviet Foreign Minister Gromyko offered the West an additional 18 months of grace in Berlin—in what amounted to an extension, not a lifting, of the ultimatum. And his price was high: During the 18 months, the West would have to cut its Berlin garrisons drastically and curtail all cold war efforts in the city. Meanwhile, East and West Germans would negotiate for reunification of Germany. If they failed to agree—as they almost certainly would—Western occupation rights in Berlin would end.

- **Basis for Hope**—Against this background, where are the hopes for compromise? They rest on the assumption—and it's no more than that—that Khrushchev really doesn't want a showdown with the West in Berlin now. It would wreck his strategy of "peaceful coexistence," delay economic development in the Soviet bloc, and run the risk of war—the last thing Khrushchev is believed to desire.

- **Possible Bargains**—The Geneva talks did reveal the shape of a possible compromise over Berlin. With some re-writing, Gromyko's last proposals might be acceptable to the West, at least as a basis for further negotiation, perhaps at the summit. There are hints that Herter may introduce them, in revised form, as his opening gambit when the foreign ministers reconvene.

If he did so, Herter would insist on these changes:

- **Removing the time limit** on Western occupation rights. This could be done simply by agreeing to negotiate again, on the basis of the status quo, at the end of a certain period.

- **Converting the Soviet proposal** for an East-West German commission on reunification into a commission to study broadening cultural and economic contacts between the two Germanies.

As they stand, several other Soviet proposals are similar enough to Western views to be negotiable. These involve Western garrisons in Berlin, banning nuclear weapons there, and limiting cold war activities.

The West is also prepared to include the East Germans in a new accord on Western rights of access to Berlin, perhaps as an "agent" of the Soviet Union. Such an agreement would give East Germany limited recognition—one of Khrushchev's key goals—and reduce the cold war potential of the West Berlin outpost. At the same time, it might not be a bad bargain for the West. It would preserve essential Western rights in Berlin and reduce, at least temporarily, its vulnerability to Soviet pressure there.

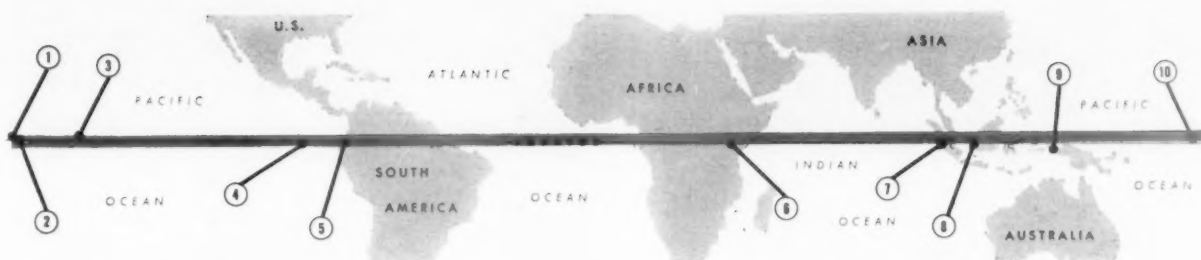
- **Uncertain Future**—But achieving even a limited agreement such as this may be a tedious process. Khrushchev may choose to stall for quite a while, and the next round of foreign ministers' talks may prove as unrewarding as the last. If the West is driven to terminate the current negotiations, Herter would consider trying to set up technical talks on German problems at a lower level.

Meantime, high-level talks between the U.S. and U.S.S.R. will take place informally—this week between Pres. Eisenhower and Soviet Deputy Premier Koslov, next month in Moscow between Vice-Pres. Nixon and Khrushchev. Says one Administration official: "As long as we can keep talking, we are relatively safe from rash unilateral Soviet moves."

However, even a complete breakdown of Berlin negotiations wouldn't necessarily touch off a new crisis, in the opinion of many officials. They doubt whether Khrushchev really wants a separate peace with East Germany; that would destroy his main bargaining weapon without gaining him anything in Berlin—unless he were willing to risk war by ordering the East Germans to interfere with Western supply routes.

- **Pessimists**—Other officials within the Administration won't buy this line at all. They argue that only a show of military readiness will deter Khrushchev. This group, particularly strong in the Pentagon, wants to put the Strategic Air Command on airborne alert, send reinforcements to Europe, and perhaps call up some reserves.

Eisenhower and Herter won't listen to this advice—unless Khrushchev turns much uglier than he has been so far, and certainly not until all hope of negotiation has been exhausted. But whatever happens in the negotiations still impending, it's clear that the West won't get off the hook in Berlin for an indefinite time to come. An interim agreement would only ease the pressure somewhat. As long as West Berlin remains an island in a Communist sea, it will be exposed to Communist squeezing.



1. Howland Island (U.S.) 2. Baker Island (U.S.) 3. Christmas Island (U.S.-British)
4. Galapagos Islands (Ecuador) 5. Quito, Ecuador 6. Nairobi, Kenya (British)
7. Padang, Sumatra (Indonesia) 8. Pontianak, Borneo (Indonesia)
9. Manokwari, New Guinea (Netherlands) 10. Gilbert Islands (British)

Somewhere along the equator, the U.S. has started to look for a space base. It needs an ...

Equatorial Space Launch Site

Within a few weeks the U.S. will probably officially decide that it needs a launching site near the equator for its satellite and space program.

Technical aspects concerning the site are being studied by a special committee set up by the National Aeronautics & Space Administration, headed by Dr. John Hagen. The Navy has scouts out to snoop, unofficially, for suitable real estate. And the State Dept. admits it has been engaged in planning talks.

The final decision, of course, will be at the top level, involving the Defense and State Depts. as well as NASA. Ultimately, Congress will get into the act to provide money—initially in the billions—and to consider any treaties that might be involved.

Selection of a site—an exceedingly tricky decision—may come by the end of the year. For technical reasons, space exploration almost has to start from very close to the equator. But picking the site for the base runs into two sorts of problems:

Geopolitics. There just isn't much suitable land available near the equator, and most of what there is (map) either belongs to someone else or lacks the height above sea level that gives the best head start for a satellite or space ship. (A 12,000-ft. elevation permits a tremendous gain in payload, since the launching rocket is able to avoid passing through the dense atmosphere at lower sea levels.)

Logistics. The best sites, from the technical view, are so far from the U.S. that supplying them would be a massive task. Two of the best—near Quito, in Ecuador, and Nairobi, in Kenya—have land available at a very desirable 2-to-3 mi. above sea level. But it would be

tough getting thousands of tons of supplies to either of them.

Even if you skip the advantages of a high-altitude base, you can't find many good spots to pick from. Thus political reasons rule out the accessible low-lying parts of Sumatra and Borneo—while the mountainous areas would be too hard to reach anyway. New Guinea presents similar difficulties, even if a deal could be worked out with the Dutch.

What's left—and available—is a sprinkling of mid-Pacific islands, mostly very small, and all low-lying. Plus, of course, Ecuador's turtle-teeming Galapagos Islands, and the steaming jungles of Africa and South America.

• **A Compromise**—All in all, there's no perfect choice to make; the eventual site will have to be a compromise. Leading candidates, according to the space people and the Navy, are the islands of Howland, Baker, and Christmas, or perhaps a spot in the Gilberts. All are roughly within 100 mi. of the equator, present no impossible defense or security problems, and are controlled either by the U.S. or Great Britain.

With a site once picked, comes the question of money. Initial cost of the base with its attendant tracking stations and fuel plants would probably run around \$2.5-billion. After that, no one has even the wildest notion of what it would cost once manned flights to the moon and other planets begin.

• **Bonus of Speed**—An equatorial launch site is especially vital for getting any big payload aloft. Because of the earth's spin, a rocket launched eastward from the equator gets a 1,000 mph. bonus to start with, thus cutting fuel needs and boosting payload. Furthermore, such a site takes a huge bite out

of the difficulties of getting the vehicle into the equatorial orbit that is a navigational must for deep space probes. Technically, it would be possible to achieve an equatorial orbit with a satellite launched from a spot such as Cape Canaveral or the Vandenberg Air Force Base in California. But this would mean a navigational nightmare, with auxiliary guidance rockets firing with almost unimaginable precision—and consuming additional fuel.

The need for an equatorial orbit for space shoot launchings also lies in the fact that a spot directly above the equator is, most of the time, most nearly in a direct line with the plane of the ecliptic in which the sun, the earth, and the planets lie. For example, the moon never gets more than 23 degrees north or south of the equator. Hence, a shot made from equatorial orbit would have by far the best chance of intercepting a planet, while the difficulties of a return trip would be eased.

• **Collaboration**—The U.S. has discussed the possibilities of joint space research with a number of governments. And there is always a chance that we will establish a launching site in collaboration with, and on territory belonging to Britain or some other "permanently" friendly nation.

In any case, observers close to the Navy expect that some spot in the reaches of the Pacific will be selected. Such a launching site would be well isolated from centers of dense population, would be within reasonable distance of Hawaii, and under effective U.S. control. You can find people close to the space authorities who will offer odds that construction on such a site will start early next year.



SIGN LANGUAGE breaks communication barrier between Russian section chief N. Boldov (right) and carpenter.

FIGURING IT OUT—American crew puzzles over exhibit in optics section of exposition.



"KOSMOS" studded with Sputniks looms as centerpiece of exhibition, on which 600 U. S. workmen labored under Russians.

Russian Bosses, U.S.

Workers of a dozen unions, readying Soviet's New York exhibition, have some grumbles, but overtime piles up fast.

A short, tousle-headed, blond engineer in a rumpled blue suit watched anxiously as a crane inched a huge gleaming aluminum alloy backdrop into place. Suddenly he jumped from his seat on a packing box, shouting, "Nyet! Nyet! No! No!"

Some 20 American workmen, struggling with the symbolic firmament that looms over the three Sputniks at the Soviet Exposition in New York's Coliseum (pictures), hung on grimly to the floating segment of the heavens as I. Parfenov tried to tell their foreman what he wanted in an excited flow of Russian.

A workman on the sidelines turned to a bystander and said: "See, we get along all right; they don't understand us and we don't understand them."

• **Exchange**—But it was soon apparent that the lack of understanding was momentary. Parfenov, once he let off

a bit of steam, quickly explained by using his hands that he wanted the base of the aluminum shell shifted about a foot before bolting on the sky-piece. The finished cantilevered representation of the sky curves 50 feet into the air as the centerpiece of the Soviet Exhibition of Science, Technology, and Culture.

The fair, opening June 30, is the counterpart of the American exhibition that will get under way later in the summer at Moscow (BW—Apr. 11 '59, p. 27) as part of the U. S.-Soviet cultural exchange program. The 10,000 Soviet exhibits range from autos (page 92), industrial machinery, and models of oil refineries and steel mills, to Soviet scientific developments, books, and art.

• **"Better Than Geneva"**—Section chief Parfenov's solution to the language barrier was widely used as the Russians rushed to get ready for their opening. Sign language, hasty penciled sketches, and—in serious cases of misunderstanding—interpreters were used to transmit orders from Soviet straw bosses to American workmen.

"We get along better here than they do at Geneva," a shop steward joked;



EXTRA TIME for painter is O.K.'d by P. Shelavitelev, section chief at Soviet fair being readied for New York Coliseum June 30.

S. Labor Stage a Geneva at Fair

"perhaps it's because we're getting more from the Russkis." In the rush to get exhibits up, the Russians were O.K.'ing a substantial amount of overtime as well as double time on Saturday and Sunday. The Russians leaned over backwards to avoid any clashes with the dozen or more craft unions representing the 600 Americans working under them.

The Soviet exhibitors, however, made no complaints, though some reportedly were impatient at what they felt to be incompetence. Ever conscious of public relations, they had nothing but praise for the U. S. craftsmen.

• **Added Costs**—The only dissonant note was a subdued one from Aleksei N. Manzhulo, exhibition director, who noted early last week that the show was going to cost perhaps \$2-million more than the \$10-million the Russians originally figured.

Although some of the increased cost might be attributed to the extra overtime—much of it inevitable in the rush—and to the work practices of the craft unions, much of it could be explained in terms of the unexpected. The fashion show, for example, was planned for the main floor. But the Russians found

there simply wasn't room enough, had to take an additional floor.

Replacement of a missing part, even something as small as a bolt, can be difficult—and expensive. Soviet bolts are threaded differently from ours. Then, too, chipped paint on an exhibit necessitates a whole new paint job, since the Russian pigments can't be matched exactly here.

• **Differences**—The Russians say that working with the Americans isn't so difficult. The 12 Soviet section chiefs were carefully briefed by the U. S. State Dept. on American work practices as well as on jurisdictional cleavages.

"We understand this now," says V. Kalinin, section chief for the Russian atomic energy exhibit. "It was a little confusing, but when a carpenter says the electrician must do the work, we get the electrician."

"In Russia," adds another Soviet technician, "we have competition but not, how do you say it, jurisdiction." He explained that Soviet workers—though organized in what might be called industrial unions—are formed into groups headed by brigadiers. These compete with each other; and though

workmen in one crew will not take orders from the brigadier of another, there are evidently no jurisdictional problems as Americans understand them.

• **Friction, Too**—Though the Russians are chary of direct comment on U. S. blue-collar performance, the workers are more frank. "They must do a lot of bull work over there," remarked a rigger, "everything is hurry, hurry, hurry." But the craftsmen expressed a grudging admiration—"they certainly know what they want, and exactly how it should be done." And one foreman reported that his boss "is a dream," never complains about overtime.

On the floor, a flareup from time to time reveals a certain amount of dissatisfaction on both sides. When riggers bolted together the two major sections of the Sputnik backdrop, Parfenov went down the line giving each bolt two more final turns. A rigger grumbled loudly, "Whaddya doin', trying to make us look sick?" Parfenov, understanding little English, made no reply. Had he understood, he might have laughed the whole thing off, for a U. S. brand of humor is one thing the workmen find the Russians share.

Housing Test for Veto Strategy

- **Compromise housing bill passed by Congress seeks "veto-proofing" by hewing closer to Eisenhower budget line.**
- **But it includes a range of programs—urban renewal, public and college housing—Eisenhower ruled out.**
- **It's the most meaningful test yet in running Eisenhower-Democratic fight—with veto indicated at midweek.**

The housing industry—now booming along on one of its biggest years ever—was looking to the White House this week for a knock or a boost.

Pres. Eisenhower had from Congress a \$1-billion-plus housing bill—an omnibus bundle of federal grants, lending authority, and loan guarantees that would cut all across the industry. The bill goes well beyond the kinds of housing aid the President wanted, though it keeps fairly close from the current budget standpoint.

By far, this legislation is the most meaningful test yet in the political fight between the Democrats and Eisenhower—and the internal battle of the Democrats about whether or not they should pass "veto-proof" legislation.

• **Veto Chances**—At midweek, there were conflicting indications as to Eisenhower's intentions—but the braver guessers, when pushed for a prediction, figured he might veto.

Here's why:

• **On the budget-busting side**, the package deliberately calls for spending only a few million dollars more in the new fiscal year than Eisenhower asked.

• **But the package approved by Congress** contains federal money or federal aid for a whole range of existing programs that Eisenhower didn't want any federal help for. Among them: urban renewal, public housing, and college housing. In addition, the legislation includes federal aid for the first time for two new programs: housing for the elderly, and classrooms and laboratories for colleges.

From Eisenhower's standpoint, the measure wouldn't bend his spending ceiling very far. But he has been equally vociferous against federal programs for housing—or other public works—that would cost the taxpayer hundreds of millions of dollars in future years, even though they are relatively inexpensive to start.

• **Toned Down**—Eisenhower's veto power was a major factor in the size of the final bill. Both the Senate and the House originally passed versions that called for larger federal aid than the measure they finally sent to the White House this week.

This is unusual action—representatives of the two houses approving legislation considerably less than either house had voted. It aroused some outspoken Democrats to renew their criticism of the leadership of Sen. Lyndon Johnson, which lately has been keyed to making legislation "veto-proof."

I. The Bundle

The single most important provision of the bill adds to the authority of the Federal Housing Administration to insure mortgages. Since last fall FHA has been using various stretchout devices to keep this reservoir from running dry.

The bill would add \$10-billion or so to FHA insurance authority—but would cut the figure back to \$5-billion if Eisenhower signs it after July 1. This is one of the Democratic "carrots" that, it is hoped, might sway Eisenhower to sign.

• **Special Aid**—The other side of the legislation—the aid given to special housing programs—is where the pinch comes for Eisenhower.

• **Public housing**: The bill authorizes 45,000 additional units; Eisenhower wanted none at all.

• **Urban renewal**: This is one of the largest programs, and one that is being fought over most bitterly. The compromise calls for \$900-million in grants to cities over a two-year period.

The Administration wanted a six-year program of only about \$225-million a year, and wanted the federal share of the costs reduced gradually from two-thirds to one-half.

• **College housing**: For several years, Congress has approved funds for direct loans to colleges for dormitories at low interest rates. These have been gobbled up quickly. Congress approved adding \$300-million to the kitty. Eisenhower had asked for \$200-million, at higher interest rates.

• **College classrooms**: The bill provides \$62.5-million for academic facilities under the same conditions that govern the loans for housing. The Administration is against any such program.

• **Housing for the elderly**: The bill would add a new \$50-million direct loan program for nonprofit corporations to

construct housing for elderly people.

• **Co-op housing**: The measure authorizes \$37.5-million for purchase by the Federal National Mortgage Assn. (Fanny Mae) of mortgages on co-op housing projects.

• **Easing**—Besides this bundle of subsidies, the measure eases the requirements for mortgages on single family houses that the Federal Housing Administration will insure.

Down payment minimums are lowered for single-family houses costing more than \$13,500.

The maximum mortgage FHA can insure is increased from the present \$20,000 to \$22,500. And mortgage maturities would be lengthened from the present maximum of 30 years to 35.

The legislation would allow FHA to insure some mortgages at higher interest rates—it raises by $\frac{1}{2}$ of 1% the allowable maximum on rental housing, co-op housing, military housing. But it does not change the present allowable ceiling of 6% on family housing mortgages. (FHA now won't insure mortgages calling for more than 5½%.)

II. The Issue

Eisenhower's political stand has been strengthened by the end of the recession, and by the new drive to cut federal programs across the board as part of the anti-inflation campaign.

The President went along in April of last year with a Democratic drive that resulted in an emergency anti-recession housing law.

The result was a quick upward jolt to housing starts—and the year finished off with about 1.2-million.

• **Behind the Clash**—Another result was that last August the Administration—with considerable support from some powerful Democrats—helped to defeat in the House a Senate-approved omnibus housing bill—much like the one Congress sent to the President this week.

After last fall's Democratic sweep, the party leaders vowed to put the big housing bill on Eisenhower's desk quickly—along with a big aid-to-airports bill, and a big program for aid to depressed areas.

Now, approaching the first of July, the Democrats find they had to keep aid to depressed areas in a backwash all session, and had to whittle the aid-to-airports law down to Eisenhower's demands.

So the question on housing shaped up like this: Would Eisenhower stick sharply to his anti-spending line—or has he won enough victories now to be able to give a bit on housing?

Alcoa Jumps Across the Ocean

● Team-up with Britain's Imperial Chemical Industries puts it once again deep into world aluminum market.

● Joint venture, in line with new partnership approach, follows moves into Japan, Surinam, Venezuela.

● Tie-up in Europe's Common Market is likely next—then Alcoa sees world market prospects almost boundless.

Thirty-odd years after it got out of the international aluminum business, Aluminum Co. of America got into it deeply this week—with one of the biggest, richest partners to be found anywhere.

That's the net of this week's announcement that Alcoa and Britain's Imperial Chemical Industries, Ltd., will form a new company to fabricate and sell aluminum worldwide. The new venture, Imperial Aluminium Co., Ltd., scheduled to begin operating Aug. 1, will be owned jointly—51% by ICI, 49% by Alcoa. It will start with two ICI fabricating plants—a sheet mill and an extrusion plant—near Swansea, Wales, with a combined annual capacity of 25,000 product tons.

● **Keystone**—Imperial Aluminium will be the keystone—but probably not the capstone—of Alcoa's reentry into world markets. That campaign began less than two years ago. Thus far, it has called for investment of several millions, and commitments of \$150-million more for raw materials, power developments, smelters, fabricating plants, and sales organizations in Surinam and Venezuela in South America, and in Japan. To all this must be added its investment in Imperial Aluminium. Alcoa resolutely declines to disclose this sum; ICI will concede only that capitalization is on the order of £10-million (about \$28-million).

Most likely, the reentry won't be complete without still another partnership with some company now doing business within the European Common Market. Alcoa spokesmen don't forecast any such move. They merely concede that it's a logical progression.

● **Partnership Route**—Alcoa's interest in reentering the world market is fundamental. It has proved that the U.S. aluminum market is a bonanza; it believes the same thing could be true of the world.

Alcoa's formula for reentry is practical. To do the whole job on its own would take too much time, too much money, too many people it doesn't now have. Hence it chose the partnership route.

Its partners thus far include names

which rank in their own countries as Alcoa's does here—Furukawa Electric Co. in Japan, Montecatini in Italy (partner in a Venezuelan fabricating venture), and now ICI. The British company operates 100 plants, has assets of \$1.5-billion-plus, and grosses \$2-billion annually from sales all over the world, including the U.S.

● **Second Try**—The ICI alliance, actually, is a little ironic. It follows by about six months a tussle which saw Alcoa's peskiest domestic rival—Reynolds Metals Co.—marry the bride Alcoa awaited at a British commercial altar. That occurred when Reynolds acquired the outstanding stock of British Aluminium, an unissued third of whose authorized stock Alcoa had been set to buy (BW—Jan. 17 '59, p. 59).

That incident disclosed that Alcoa was interested in effective West European or United Kingdom affiliation. ICI, feeling it needed knowhow and an assured aluminum supply to make something of the aluminum business it got into in wartime, took the cue.

Those who wonder whether Alcoa ultimately came off second-best can ponder these financial aspects of the two moves:

● **British Aluminium** approached Alcoa because it needed money for expansion. Stock control ultimately sold at a price higher than the offering price to Alcoa—a price Alcoa considered a little high.

● **ICI**, far from needing cash, has sales more than double Alcoa's, and assets several hundred million dollars greater.

● **Prize**—Plainly, the most important single thing Alcoa gets is a sales organization in being all over the world. It does get an interest in some fabricating capacity, and by next year will get a new captive market for ingot which it could serve wholly by water.

But it's that sales organization—which has been peddling nonferrous metals for 20 years—that's the main attraction.

Here's why:

● In the U.S., per capita consumption of aluminum is 21 lb. per year (it was up to 24 lb. in 1956). And it's

growing very nicely at the present time.

● In Western Europe and Canada, it averages 6 lb. per capita (in the United Kingdom, it's 10 lb.). In the rest of the world outside the Iron Curtain, it's figured at .7 lb. per person per year.

● **Free to Move**—Another factor, too, motivates Alcoa's new internationalism. For the first time since it turned its Canadian properties over to the Aluminium Co. of Canada and pulled out of world markets in 1928, it's free to move. First there was the Depression, then an anti-trust suit that threatened its existence and colored all its thinking for 20 years, then war and boom-time scarcities of aluminum.

In short, Alcoa couldn't have got into world markets any sooner than it did, about a year and a half ago, with the Surinam commitment and the Furukawa partnership. From Surinam it has been getting bauxite for some time, is now committed to begin work next year on a 150,000-kw. hydroelectric development; later there'll be an alumina plant, and a 60,000-ton smelter to be ready when power generation begins. So Surinam will eventually supply aluminum ingots.

When Alcoa penetrates the Common Market, it will have the Free World population just about blanketed. If those markets grow only one-quarter as far and as fast as the U.S. market, the future will be simply too big and too busy to be believed.

● **Self-Competition**—It's going to be engrossing to see who gets the business. Alcoa already will fill any order it can get anywhere in the world. ICI's worldwide sales staff can, does, and will compete for U.S. business. Its field also includes Asia, where Furukawa is on the scene. So Alcoa agrees it will be competing with itself and its partners—as well as its competitors—everywhere the Russians don't control trade.

That doesn't upset Alcoa a bit. Twenty years of antitrust struggle have left it shy of anything that even hints at collusion, here or abroad. And it's so firmly persuaded the world aluminum market is simply enormous that it sees business enough for all.

● **Setup**—With its 49% ownership, Alcoa will have two of five Imperial Aluminium directors. It will contribute some technical people, train some Imperial people here. And plainly, as the market grows, it will furnish the smelting capacity to supply it. Surinam will be an ideal long-range ingot source.

ICI will have three directors, including Dr. James Taylor, an ICI board member, as chairman, and Berkley Villiers, now in charge of ICI aluminum business, as managing director.



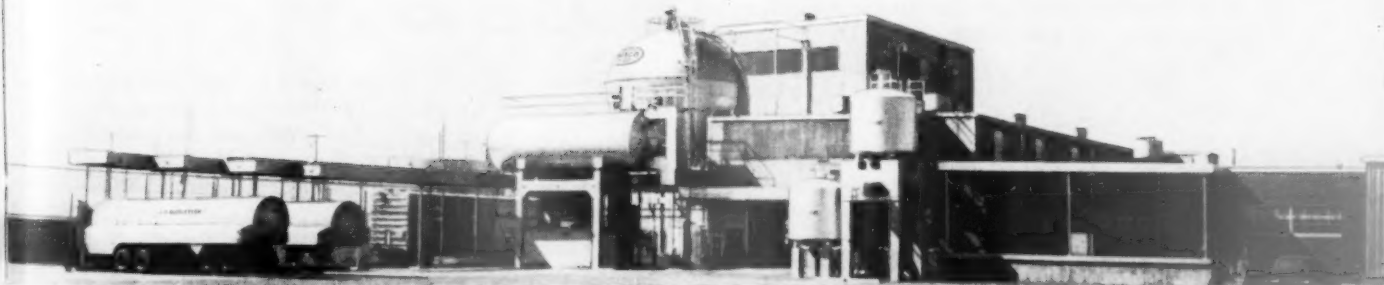
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In Business

• • •

Machine Tool Orders Drop in May

But Trade Sees Just an Interlude

New orders for machine tools—closely watched as a barometer of manufacturers' plans for modernization and expansion—turned down in May, dropping to \$48.1-million from April's \$53.2-million.

However, observers found two reasons for thinking the drop was an interruption rather than a reversal of the rising trend that began last October:

- The downturn was from an April level that had been the highest of the recovery period.

- Most of the drop was in export orders. Domestic bookings fell only about 4% to \$45-million from April's \$46.9-million.

• • •

Antitrust Suit Hits Kennecott

For Acquisition of Copper Fabricator

The antitrusters fired an anti-merger blast this week at Kennecott Copper Corp. for its acquisition last fall of the Okonite Co., an important fabricator of insulated copper wire and cable. In federal district court in New York, the Justice Dept. charged that the acquisition violates the Clayton Act and may substantially lessen competition in the production and sale of copper, copper products, and copper wire and cable.

The suit—filed in the same court that last year ruled against the Bethlehem-Youngstown steel merger—argues that Kennecott's acquisition of Okonite is one more in a long series of mergers and acquisitions that has resulted in heavy concentration in the copper industry. The government claims that independent copper fabricators are being squeezed more and more by the movement of major producers into fabrication.

Kennecott spokesmen refused detailed comment till lawyers study the case, but said they were confident the Okonite deal had not violated the law.

• • •

Old Colony Line's Commuter Service

Seems Doomed As Subsidy Runs Out

The New Haven RR's two-year struggle to keep commuter services going on its Old Colony line with the aid of public subsidies appears doomed. Passenger operations on the line will end June 30, in all probability.

Since last July 1, the Old Colony has kept going with the help of \$900,000 supplied by Boston and 37 towns along the route (BW—Jul.12'58,p28). New subsidies would be needed to keep the line working after June 30, and the New Haven wanted an increased amount as well. But the commuter communities have rejected further subsidies for the line, the legislature says it won't help,

and New Haven Pres. George Alpert says service won't continue if the Old Colony deficit is not covered.

The subsidy paid since last July was supposed to buy time to work out a permanent solution, but none has been found.

Elsewhere, there's better hope for commuters.

In New York, the first part of Gov. Nelson Rockefeller's railroad aid plan (BW—Mar.21'59,p106) begins next week with tax relief that starts at \$1.5-million in fiscal 1960 and mounts to \$15-million a year by 1963.

And in Philadelphia, the city's "Operation North-west" rail subsidy scheme has worked well enough through its first six months to prompt a decision to extend subsidies to Reading Co. suburban rail lines in September.

• • •

Coast Druggists to Test Extension

Of Health Insurance to Prescriptions

Druggists in California are banding together to try out prescription insurance—a plan that enthusiasts think might send the prescription business for the whole U.S. up as much as 40% above its present annual \$1.8-billion.

A similar plan has been operating for a year with considerable success in Windsor, Ont. The California druggists, organized as Prescription Service, Inc., will start their plan in about four months, in Fresno and Merced counties.

Cost of the insurance is expected to run between \$4 and \$10 a month for a family of four. Policyholders will get all their prescriptions free.

• • •

Peace With Victory for Oil Companies

Seen in West Coast Antitrust Case

Six out of seven West Coast oil companies last week signed a consent decree that gave them what is considered a complete victory in the nine-year-old antitrust suit. The seventh defendant, Texaco, did not sign, and presumably will stand trial.

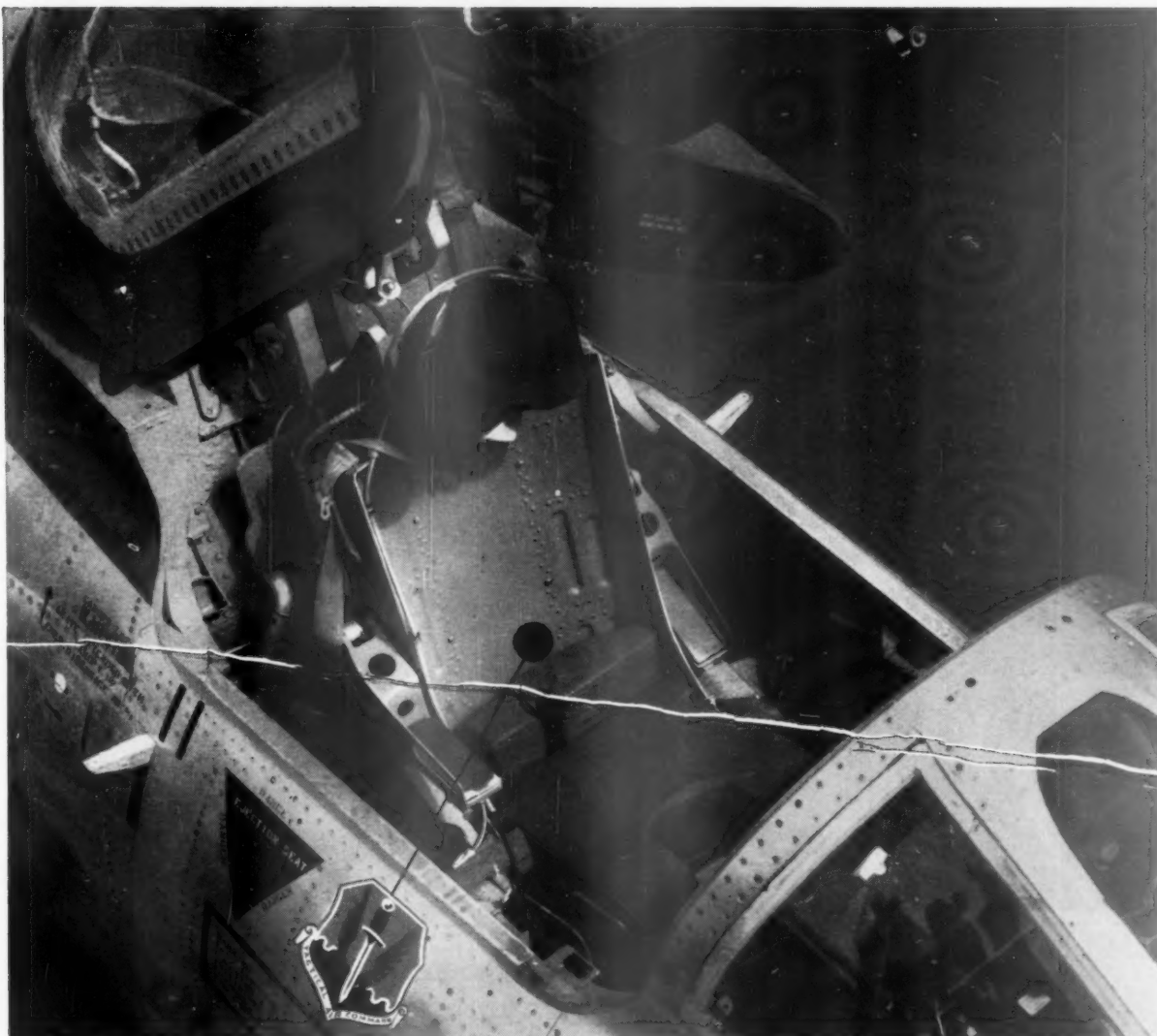
Essentially, the government hoped to force the companies to divest themselves of West Coast service stations. This the court refused to order, and the consent decree is expected to bring no changes at all in the operations of the signers: Standard Oil of California, Shell, Richfield, General Petroleum, Tidewater, and Union Oil.

However, operators of service stations claimed that the decree would greatly improve their position in relation to the big producers.

• • •

Northeast to Lease Jets for Miami Run

Northeast Airlines will begin daily New York-Miami jet service in September, using Boeing 707s leased from Trans World Airlines. If the Civil Aeronautics Board approves the deal, Northeast will have a firm entry in the lucrative Florida run, now dominated by National Airlines and Eastern Air Lines.



DRIVER'S SEAT

In previous wars, the United States, as defender, had time to train its forces, arm its men, build up to retaliatory strength. A "next" war would strike with lightning speed and could be over within weeks . . . days . . . hours. The battleground would be in aerospace, the special operational field of the United States Air Force.

A vital portion of this country's retaliatory effort . . . whether the threat of war is limited or total . . . is contained in the Air Force's combat commands . . . SAC . . . TAC . . . and NORAD* working with our allied forces at home and abroad. Today's cold interim warfare is a matter of the Air Force matching the possible aggressor's new offensive equipment and of keeping well ahead in weapons systems.

To Air Force men, collectively and singly, complacency is unknown. The individual airman's awareness to possible attack is as strong a deterrent to war as the tools he uses, the worldwide complex of warning systems, armament and aircraft. Where freedom is, the Air Force is. There, too, is the Republic all-weather F-105 Thunderchief, "world's most powerful one-man aircraft" . . . with a TAC Air Force pilot in the "driver's seat." Man-and-machine are a prime force in keeping our aerospace intruder-free.

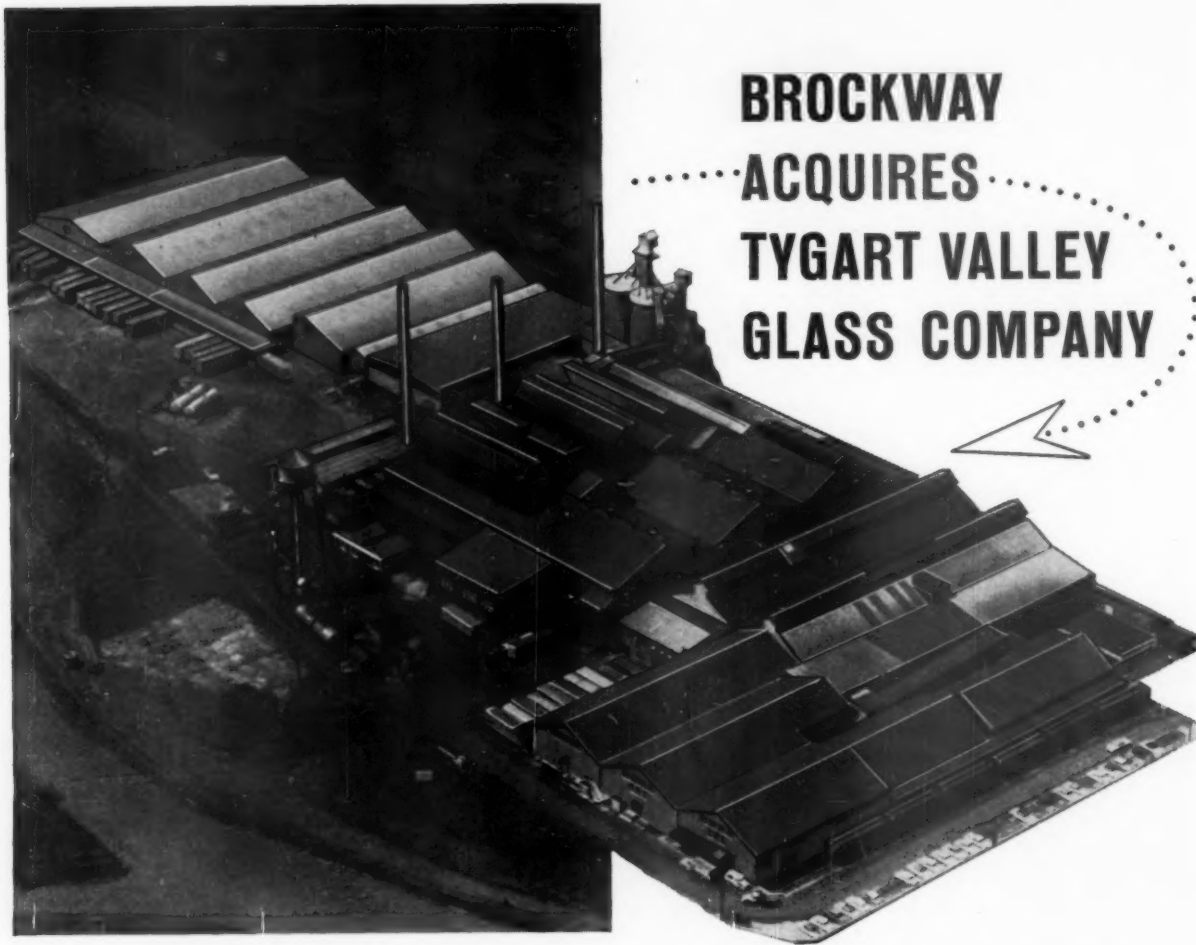
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of the customers of both companies. It also integrates management skills and operating personnel as well as vital research and engineering capabilities.

This is another progressive step in our overall growth plan to enable us to constantly improve our facilities and abilities to serve our customers in the food, beverage, beer, liquor, Rx, pharmaceutical, toiletries and household chemicals industries.



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COMPANY, INC.

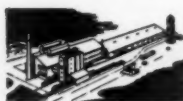
Brockway, Pennsylvania



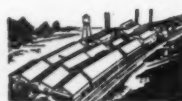
Lapel, Indiana,
Plant



Crenshaw, Pa.,
Plant



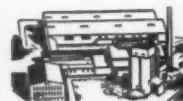
Freehold, N. J.,
Plant



Brockway, Pa.,
Plant



Subsidiary:
Demuth Glass Works, Inc.,
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Muskogee, Okla.,
Plant

WASHINGTON OUTLOOK

WASHINGTON
BUREAU
JUNE 27, 1959



Pres. Eisenhower is wheeling up big armament against inflation. The move is timed to the steel wage-price dispute—the biggest event outside government spending decisions that could affect Eisenhower's "sound dollar" campaign.

The newest attack is the weekend publication of the first report of the Nixon Committee—the Cabinet level group that Eisenhower named early this year to watch the inflation threat. Vice-Pres. Nixon's group distributed the report early to the press, marked "Hold for release," just before the steel strike deadline. The White House made sure newsmen had plenty of time to read the report before writing; officials were available for briefings.

The motive: to get the most out of the report's language, both for drama and for impact. The committee is blue-ribbon, made up of Eisenhower's top economic and political advisers—Treasury Secy. Anderson, Agriculture Secy. Benson, Postmaster Gen. Summerfield, and Raymond J. Saulnier, chairman of the President's Council of Economic Advisers.

The report is aimed to win public support for Eisenhower's stand against a new wage-price spiral, as well as against big-spending legislation from the Democratic Congress. Eisenhower, confident he has won the spending battle, now wants to block a general round of new wage-price increases.

The Administration position is this: Wage increases that are tied in with productivity increases are all right. Advisers say these can be paid without inflationary consequences. Sure, the consumer may be denied any cut in prices. But, as these men see it, he won't have to pay more.

Other policies being pushed:

Credit tightening by the Federal Reserve Board.

Higher margin requirements on stock buying.

Higher interest rates.

The plain fact is that recent actions by the Federal Reserve Board have been in keeping with what the Eisenhower Administration wants. The White House hasn't dictated to the Reserve Board, as was true in the Truman Administration. But it does support the board's moves to raise discount rates and thus to tighten credit.

More freedom for the Treasury to set interest rates will be pushed. This is important at a time when Democrats in Congress are pressing the Treasury to come up with other ways to market its obligations. Democrats, looking for issues for 1960, lean more and more to the inflation side, favor measures of an inflationary character. Many would like to see a return to the old government bond market peg, with the Fed insuring a fixed price for Treasury securities.

Eisenhower's anti-spending drive will be tested again this week. He beat down the Democratic spending plans for federal aid to airports: Congress finally gave him a two-year, \$63-million-a-year aid bill, just about what Eisenhower himself proposed. Now he has a veto decision to make

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
JUNE 27, 1959

on the new housing bill, which is much bigger in dollars and programs than he wants (page 32).

—●—

Note Congress' action on the wheat bill.

The significant thing is the decline of the farm bloc in the House. Farm-state members could get their version adopted only when urban eastern members were absent. City representatives normally take a long weekend off to visit at home. When they are present and voting, they can block a farmer-sponsored bill—as they did once during the wheat bill debate. The final version, which ties sharp acreage cuts with high supports, came when city members were gone. Eisenhower will veto the bill, and will be upheld.

The long-term implication is clear. Agriculture no longer can write its own ticket in Congress. The urban dweller has the advantage. The only reason that a wheat bill reached the White House at all is that the Democratic leadership in Congress wanted to put Eisenhower on a spot. The coming veto of the bill will be used in 1960 as evidence that Eisenhower and his Agriculture Secretary, Benson, are opposed to the family farmer—the small operator who must have high prices to survive.

—●—

Bills for defense contractors to watch:

- Renegotiation will be extended for three or four years. The big difference between House and Senate bills is on the rights of contractors to appeal renegotiation decisions.
- Military procurement rules probably won't be changed by Congress in any important respect. But you probably will see the services, as a defensive measure against Congressional legislation, show a trend toward more contracts by competitive bidding, as against negotiated contracts. Congress doesn't like negotiated contracts. But it doesn't know how to rule them out entirely, since so many contracts deal with new items.

—●—

Congress won't make many changes in labor laws.

The Kennedy reform bill is no better than an even-money bet. The Democratic leaders may decide to let the issue go over to next year.

On wages and hours, the prospect still is that the \$1 minimum will hold this year, with no extension in coverage.

Uniform state unemployment compensation standards seem doomed. With the business pickup, Congress is losing interest.

—●—

Washington's liberal GOP faction got a jolt from the national meeting in Denver of the Young Republicans. The so-called youngsters seem much more conservative than their current party leaders.

Nixon was the favorite for 1960. Support for Rockefeller was lacking.

Federal aid for schools got no support.

Public power ownership was opposed.

On labor, so-called state right-to-work laws had strong backing, not by name, but by implication.

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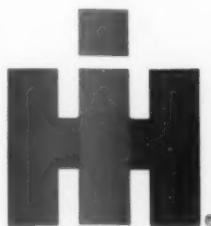
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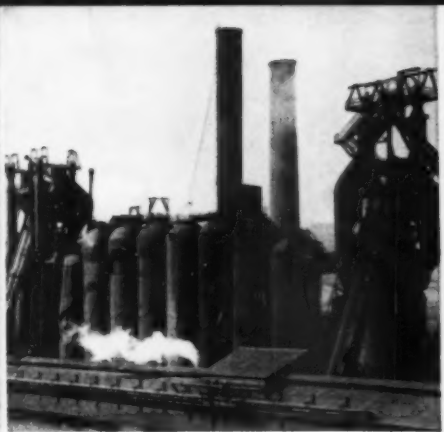
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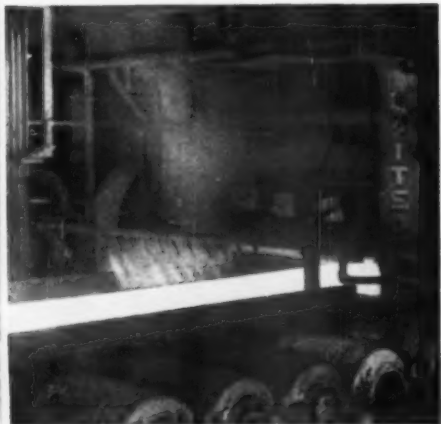
New 400,000-ton capacity blast furnace



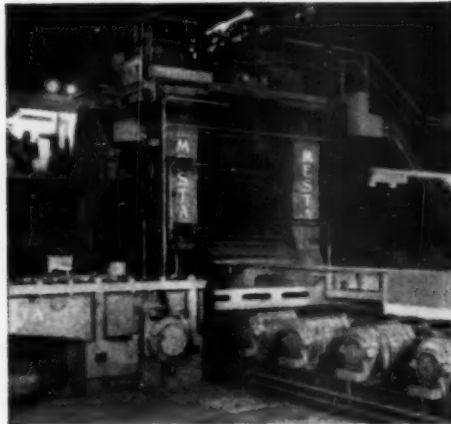
New \$11 million basic oxygen furnace facility



New \$74 million, 11-furnace open hearth shop



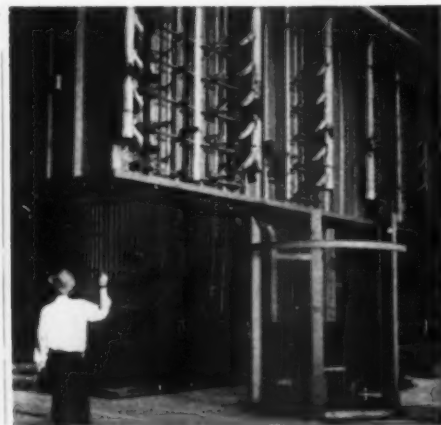
New horizontal scale breaker



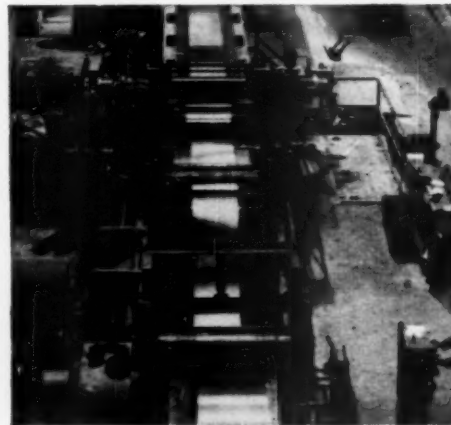
New \$12 million reversing roughing mill



New punch-card controls for quality control



Twenty-five new annealing furnaces



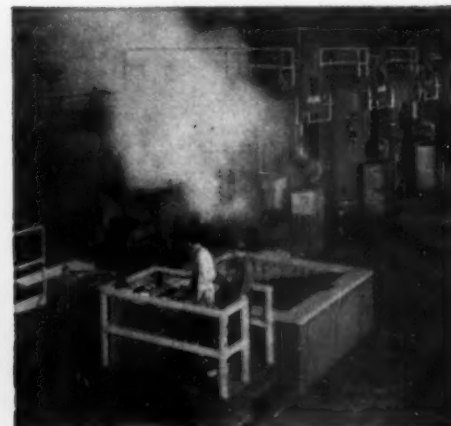
New high-capacity cold shear line



New 3/8-inch high-speed hot shear line



New 56-inch precision temper mill



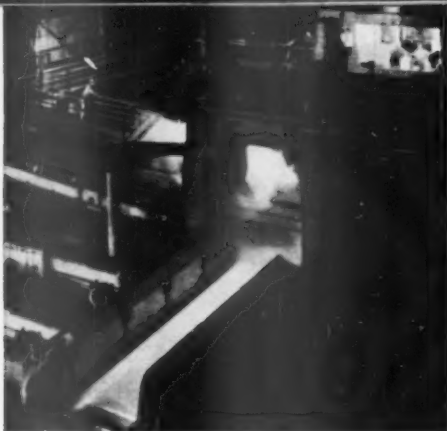
New \$36 million, 44-inch hot strip mill



Improved 96-inch hot strip mill



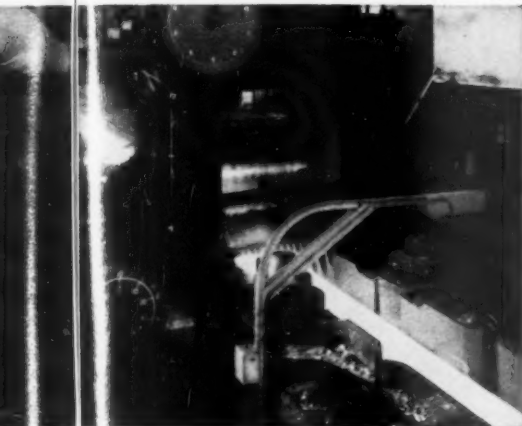
New ingot re-heating furnaces in all steel plants



New \$17 million, 68-inch blooming mill



New automatic oxygen scarfer



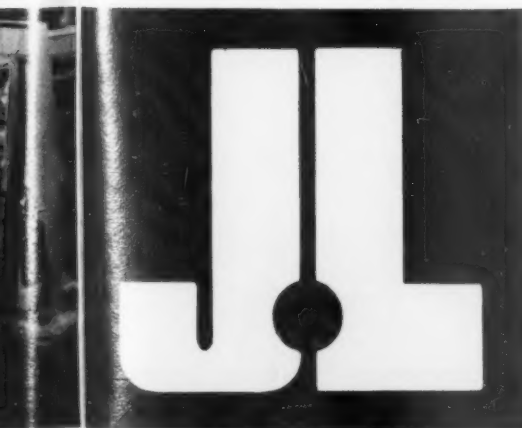
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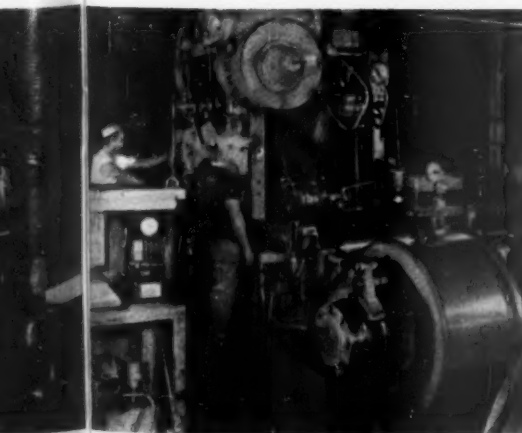
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New \$6¼ million Sandzimir galvanizing line



New \$62 million stainless steel facilities

40



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RESEARCH

Dozens of companies are working on fuel cells, such as this model by GE (right).

Combining chemicals, a fuel cell gives you electricity directly, with no intermediate heat, no engine or generator.

It's the sort of process that makes a flashlight battery work. Now new materials and methods make the fuel cell many, many times as powerful and efficient—and promise a . . .



New Family of Power Producers

The silent, smokeless, non-heating power plant of the future—fixed or light and mobile—is foreshadowed by the General Electric Co. model in the picture. It's a model of a fuel cell that draws electricity directly from a chemical reaction.

After a decade of research, it suddenly begins to look as if fuel cells might end up supplanting the internal combustion engines in automobiles and supply the electricity for a wide variety of things from portable radio transmitters to space ships.

Work on fuel cells has been stepped up in recent years by demands of the military for new and improved power sources that are simple in design, can withstand vibration, shock, and extremes of temperature, and give off no telltale waste products. In dozens of industrial and government laboratories, research has finally reached the point where a practical and revolutionary power plant of this sort may be only a few years away.

Men working in the laboratories can visualize a small car, for instance, with a simple box under its hood which would be about the size of a suitcase and weigh less than 100 lb. It would be fed with liquid fuel. From terminals on the box, electric current would flow to motors driving the wheels. The box would be cheap, might be turned in every 1,000 miles or so.

• **Search for Efficiency**—The dry cell in a flashlight and the battery in your car are examples of fuel cells, though not with the kind of efficiency the re-

searchers are talking about today. They go back to the work of Sir Humphrey Davy 150 years ago, when he experimented with a fuel cell using carbon and nitric acid. Their power output is low.

The scientific search for more power and greater efficiency out of such electrochemical reactions never really stopped in all those 150 years, but only eight or nine years ago research seemed to have reached an impasse. Scientists knew the fundamentals of what they were looking for, but they were baffled by selecting the proper ingredients. They weren't able to get enough power out of fuel cells, or enough power in relation to weight or volume of the cells, to make them serve any but specialized uses.

• **The Tide Turns**—In the past few months, the tide has begun to run in favor of the researchers. Advances in solid-state physics and in knowledge of catalysts, the substances that speed up a chemical reaction, have provided the answer to some of the old limitations of fuel cells.

Any fuel cell contains certain elements, separately or in combination: two electrodes (one positive, one negative), an electrolyte that serves as the connecting medium between the electrodes, and two kinds of fuel—an oxidizing agent and a reducing agent. A catalyst should be able to promote the action among these ingredients.

In almost all the sudden advances made recently, the victory was due to development of better electrodes or to

new ways of applying a catalyst to the electrodes. Many scientists think the electrolytes are about as effective as they'll ever be. Fuels are the subject of intense experimentation. And, most of all, research is aimed at the best possible way of putting all these materials together.

• **High Potential**—In theory, a fuel cell package can be built in almost any size and power-generating capacity. If more power is needed, two or more cells can be hooked up in series.

Versatility of the fuel cells appeals to scientists. They can select cells for various purposes, can use them singly or in batteries to produce any volume of power from microwatts to megawatts over various time spans and for various voltages and currents.

Designers will still have to compromise, for they can't yet get all the advantages in one type of cell, and power and efficiency will have to be balanced against other considerations, such as low-temperature operation, small size, long life span, cost of raw materials, need for fuel storage equipment.

As a family of power producers, though, fuel cells offer many benefits:

• A minimum of maintenance and care, thanks to the elimination of most or all moving parts.

• Greater efficiency, in the area from 60% to 80%, compared with not much over 40% for conventional power generators using heat and machinery.

• Simplicity of design, since a fuel cell doesn't produce the wastes of a combustion reaction—heat, smoke, and



U.S. business has invested more money in Venezuela than in any other country in Latin America and, excepting Canada, in the world. The reasons are obvious. Venezuela has an abundance of resources, strategic location for foreign trade, a rapidly increasing consumer market, a highly skilled labor force and a growing middle class.

Moreover, there has been no discrimination between foreign and domestic capital. Another reason is a stable economy with no monetary exchange problems. All this has added up to making Venezuela's per capita income the highest in Latin America.

Many alert U.S. enterprises already have established operations in Venezuela and others have included Venezuela in their plans for future growth. For your copy of a data-packed brochure about investment opportunities in Venezuela, write President, Cía. Anónima Luz Eléctrica de Venezuela at the address below or Area Development Section, American & Foreign Power Company, 100 Church Street, New York 7.

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noise. Fuel cells generally yield such innocent byproducts as carbon dioxide and water. That's one reason they interest the military; their location is extremely hard to detect.

- **Measuring Progress**—Companies that have reached the threshold of practical fuel cells are understandably close-mouthed about exactly which catalysts and electrodes they are using in their latest and most successful experiments. But their progress is measurable.

The conventional way of measuring the energy produced by an electrochemical reaction is in watt-hours per pound of weight. A standard auto battery is rated at 8 to 10 watt-hours per pound; some of the newer fuel cells are reported to be approaching 250 or 300 watt-hours per pound. This is more than enough to make the auto industry take the new cells seriously as a future source of power.

Further progress, most researchers agree, is a matter of choosing the right combination among the electrolytes and electrodes that are already available, and then finding the fuels that work best in a given instance.

- **Choice of Fuels**—The choice of fuels is perhaps the widest of all. The combinations of two or more are almost unlimited. Each fuel cell needs the two kinds of agent—an oxidant and a reductant—singly or in combination. Molecules of an oxidant are characteristically eager to throw off electrons to some other molecules; those of a reductant are prone to accept any electrons that are available. It is the flow of electrons that makes possible the electrochemical process.

Among the oxidants currently used in fuel cells are oxygen, air, and chlorine; among the reductants are hydrogen, carbon monoxide, natural gas, methane, ethane, coal, formaldehyde, alcohol, zinc, and magnesium. Both types of fuel must be fed continuously to the cell or the reaction will stop. But some of the components of the cell may serve double duty, an electrolyte also as a reductant, for example.

- **The GE Cell**—The General Electric model fuel cell pictured on page 45 uses an electrochemical reaction between oxygen and hydrogen to produce electrical energy, with water as a byproduct. It has a thermal efficiency of more than 60%.

The process by which the electric power is generated is called an oxidation-reduction type of reaction. It takes place at the interface between an electrode and the electrolyte. At this point where diverse elements meet, electrons flow from one element to the other, setting up an electric current.

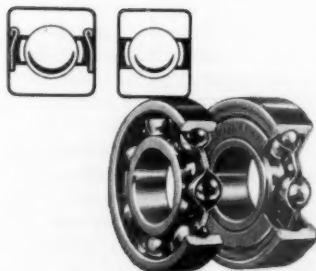
This behavior of electrons at junction points of dissimilar materials was known for centuries, but scientists had only a vague idea of why it happened. Finally,

It pays to call in New Departure...



Automatic Carriage Photo: courtesy IBM Corporation

Accounting machine manufacturer ups performance, cuts costs with **NB** bearings



Small cross sectional drawings of bearings for restricted space applications. They are available from standard production with bore sizes from $\frac{1}{8}$ " to $1\frac{1}{2}$ ".

A prominent business machine manufacturer was looking for ways to improve performance and reduce production costs of an automatic accounting machine . . . and he contacted the man from New Departure. His N/D Sales Engineer helped in the redesigning of the machine's automatic carriage drive clutch gears. Four special bearings were replaced by four New Departure standard ball bearings with original quality of the machine maintained. These bearings reduced parts costs to net a substantial yearly savings for the manufacturer! What's more, the manufacturer promises years of maintenance-free bearing operation . . . because New Departures are built to be forgotten! When it's a question of improving performance and lowering production costs of your product, why not contact the man from New Departure? For more information write Department A-6.



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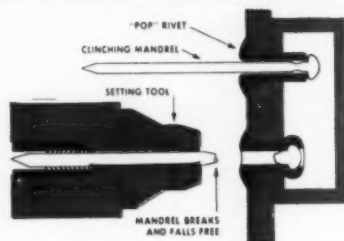
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enough fundamental knowledge was built up so it became possible to select materials that facilitate the transfer of electrons. One good way, researchers have recently found, is to choose an electrode made of a porous solid. Gaseous fuels are able to penetrate the surface, finding a greater surface area for the electrochemical reaction to take place.

• **Many Approaches**—With all the excitement about accelerated progress in fuel cell research, scientists still can't agree on which system will pan out best. Both here and abroad, researchers are studying a wide variety of approaches. These are in various stages of development, which makes them hard to compare, but here is a sampling of who's doing what:

I. Hydrogen-Oxygen

The hydrogen-oxygen fuel cell is being pushed very actively in the U.S. by GE, National Carbon Co., Patterson-Moos Div. of Universal Winding Co., Electric Storage Battery, Allis-Chalmers, Chrysler, and the Army's Signal Corps Research & Development Laboratory. Similar work is going on in Germany, Britain, and Russia.

In this method, hydrogen and oxygen are the fuels, while a concentrated alkaline solution serves as electrolyte, and the current from the reaction is picked off by specially treated non-consumable electrodes, frequently made of nickel and carbon.

Hydrogen is fed continuously into the cell to saturate the positive electrode, thus acting as the attackable substance in the electrode. Similarly, oxygen is fed to the negative electrode to form hydroxyl ions, which migrate across the electrolyte to react with the hydrogen at the anode-electrolyte interface, forming water and setting up an electrical current.

National Carbon, whose fuel cell is well advanced, prefers electrodes of semi-waterproofed active porous carbon. In Britain, the Bacon cell uses porous sintered nickel electrodes; conductivity is increased by impregnating the cathode with small amounts of lithium.

Patterson-Moos, working under a Bacon patent, and National Carbon are both well into pilot plant operations. P-M is said to be building a 1.5-kw. hydrogen-oxygen fuel cell for the Air Force and a 10-kw. job for the Navy.

II. Molten Salt Electrolyte

General Electric, Curtiss-Wright, and Consolidation Coal Co.—as well as researchers in Britain, Germany, Holland, and Russia—are working on a type of fuel cell characterized by high operating temperatures, fused salt electrolytes, and fuels that are cheap and plentiful.



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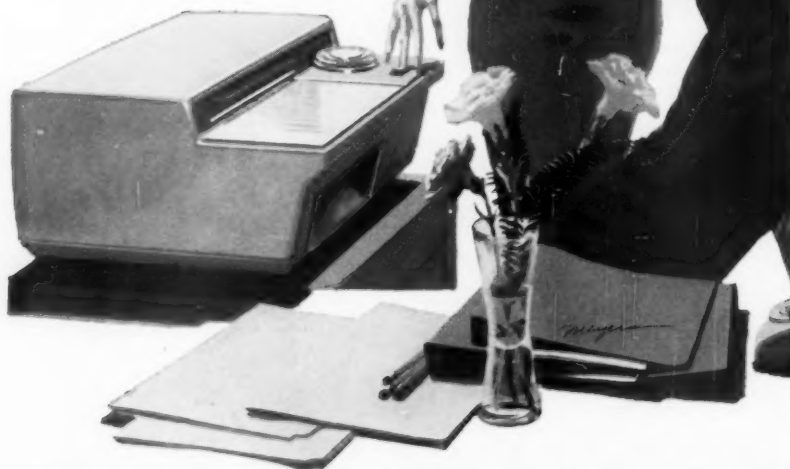
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So far most models have used such reducing fuels as carbon monoxide, natural gas, water gas, or other gaseous hydrocarbons. Either air or oxygen can be used for fuel. The electrolyte is usually a mixture of alkali carbonates, immobilized within a porous, non-conducting matrix such as magnesium oxide.

Until very recently, the molten salt electrolyte cells have generally been written off as of limited use, because of the very high (500-800C) temperatures needed for operation and a power output that is much lower than hydrogen-oxygen cells of corresponding potential. Now, though, research shows signs of budging both these obstacles; fantastic efficiencies and power potentials are claimed for cells about ready to emerge from the lab.

III. The Redox Fuel Cell

The redox cell uses chemical intermediates to convert the energy of its fuels into electricity. An intermediate reductant—usually a liquid electrolyte—reacts at the anode in the usual way, and is then completely regenerated by reaction with the cell's primary fuel.

In theory, an intermediate oxidant could also be used and regenerated. GE and Lockheed Aircraft Corp. (BW-Dec.6'58,p37) have been especially intrigued by regenerative principle, but no cells of this type have yet been shown publicly.

This type of cell has many assets, and avoids the problems of either solid or gaseous fuel electrodes. It's easy to separate the electrochemical process from the regeneration, which can be arranged outside the cell walls. A redox cell can use fuels of varying purity, which is a big asset, too.

IV. The Regenerative Fuel Cell

The Mine Safety Appliance Research Corp. is the only outfit known to be doing much work on a completely regenerative fuel cell. Since such a fuel cell must be a closed system, its reactants must be continuously regenerated from the products of the reaction.

A model using lithium hydride as its active medium needs a temperature around 450C for its reaction—too high for most practical use except where plenty of cheap thermal energy is available. Such an energy source could be thermal or solar, but either way, overall efficiency will probably be a limiting factor for this type of fuel cell.

V. Consumable Electrodes

Much more rapid and hopeful progress has been made in the consumable electrode fuel cell, which is based on the continuous consumption of materials functioning dually as fuel and

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Tips to help you cut impact socket breakage

- Position power wrench so that socket fits straight on nut. Tilted wrench causes binding and socket breakage.
- Use right size socket... replace worn or undersize nuts. Loose-fitting sockets wear faster — then break.
- Don't keep impacting after nut is tightly set. This causes needless wear on both wrench and socket.
- Keep the inside of sockets clean. Dirt and grease are common causes of socket breakage.
- When power wrench drive head becomes worn — replace it. Loose drive causes excess wear in socket drive opening — early socket breakage.

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quent breakage of ordinary sockets.

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electrode. Leaders in this field are National Carbon, Aerojet-General, RCA Laboratories, the Armour Research Foundation, Dow Chemical, and Resin Research Laboratories. Most of this type of cell consists of a metal anode made from an alkali or alkali-earth, a liquid electrolyte, and solid cathodes—usually of some active organic material mixed with graphite. Anode and cathode materials are fed into the cell continuously in the form of movable rods. Among fuel cells, this type is distinguished for its low operating temperature and relatively high power-weight ratio.

National Carbon, for one, thinks the consumable electrode principle offers the widest applications, particularly for the transportation industry. Sodium and oxygen are used as fuels in a cell that is now being studied by National Carbon, but air can replace oxygen without too great a loss of current. Aerojet is working on zinc and chlorine; feasibility has been demonstrated but its cell lags behind others on the developmental road.

VI. Ion Exchange Membrane

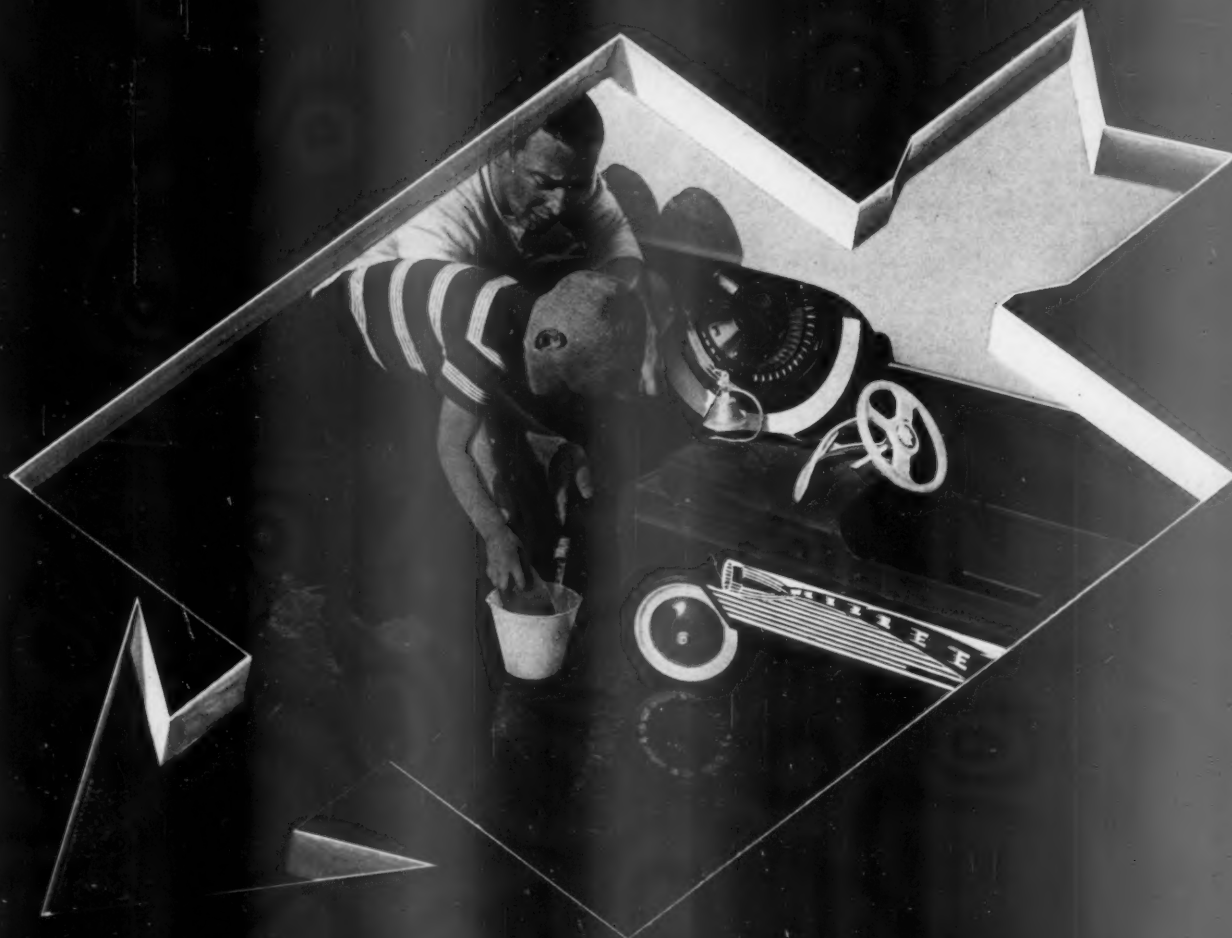
The other type of fuel cell now under study uses an ion-exchange membrane as its electrolyte, instead of the usual liquid or molten salt. GE's Dr. W. T. Grubb first suggested that this principle might work. Actually it operates rather like the hydrogen-oxygen fuel cell. The chief difference is it has a porous membrane in which are fixed groups of ionized atoms. These groups can be charged either positively or negatively, and are called cation or anion exchangers. Their function is to carry charged particles released in the cell to the spot which permits the greatest possible discharge of current.

In the past few months, this type of cell has attracted favorable notice because of its low operating temperature, the absence of any liquid electrolyte, and its good power-weight and power-volume characteristics.

• **Others in the Field**—Many other companies besides those mentioned above are working on fuel cells, notably Westinghouse, Ford Motor, and Esso Research. Almost simultaneously, a lot of people working in a lot of different places have found the fuel cell a very hot prospect. And something really important is obviously about ready to emerge from the general smog of reticence.

Last week, Yale & Towne's Pres. Gilbert W. Chapman predicted that a fuel cell breakthrough would soon completely transform the business of transportation. With such a prospect, no company even remotely related to the field of power generation can afford to ignore the fuel cell. **END**

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New moistureproof roof insulation is easy to install for lifetime efficiency

Making news on roof-tops is a Dow insulation material that provides its own moisture barrier. Its name is Roofmate . . . worth remembering for long-range efficiency and economy.

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Millions of tiny air bubbles in Roofmate give it top insulating value and excellent resistance to water and water vapor. This faculty for staying dry reduces blistering and resultant leaks in built-up roofs . . . cuts maintenance to a minimum and increases roof life.

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ventional roofing methods.

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If there is a built-up roof in your plan for a commercial, industrial or residential building, ask your architect or building contractor to investigate the advantages of Roofmate.



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COPPER-COATED Thomas Strip coils, 1½" wide, are made into the intricate television control part shown in the inset.

Thomas Strip Is Cost-saver at TV Parts Plant

For 20 years, copper-coated Thomas Strip steel was known at Chicago Telephone Supply Corp.'s Elkhart, Ind., plant as the metal to conquer a metal-working plague—scalping during deep draws.

Now the precision-rolled product of Pittsburgh Steel Co.'s Thomas Strip Division has new claims to fame. It makes possible a one-piece, extruded and stamped mounting plate used to assemble and connect the variable resistor to the television set chassis.

Previously, Chicago Telephone made the grounding plate and mounting bushing in two pieces. The bushing being a relatively expensive brass mounting device, Thomas' copper-coated makes it possible to blank out the intricate part, punch a hole in its

center and then extrude the edge of the hole into a load-bearing neck. All this is done at high production speeds with progressive blank and form dies.

In many applications at Chicago Telephone, similar severe demands are imposed. Examples:

- ▶ **THICKNESS TOLERANCE**—As tight as $\pm .0005$ ". A variation of $\pm .001$ " can cause a potentiometer cover to be off .005".
- ▶ **UNIFORM TEMPER**—Some parts are made at speeds up to 400 units per minute. Any wide hardness deviation results in troublesome forming variations.
- ▶ **SHEARABILITY**—Punched and blanked parts have tolerances so snug that the slightest burr prevents proper assembly.
- ▶ **UNIFORM COPPER COATING**—Copper

acts as a necessary die lubricant and a base for nickel plating. When the mounting plate was made from plain steel, die life ranged from 40,000 to 62,000 units. Now, with the more difficult mounting plate, die life averages 250,000 units between regrindings.

Whether you need dimensional accuracy, surface, temper, aid to die life, chemistry or design and production advantages, you'll find them in Thomas Strip. It is a controlled rolled steel, plain or in a variety of electrolytic coatings of copper, brass, nickel, zinc, tin, chrome and lacquer with a full range of tempers, widths and finishes. Thomas Strip also is available with an attractive but durable pattern rolled right into its surface. For details, contact any sales office. Do it today.

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In Research

• • •

United Aircraft Gets Big U. S. Contract For Modernization of Weather Forecasts

Federal agencies this week awarded a multi-million dollar contract to United Aircraft Corp. for development of a prototype group of weather forecasting facilities at eight or more civilian and military airports between Boston and Washington (BW—May 8 '59, p123). It's a joint program of the Federal Aviation Agency and the Defense and Commerce Depts. Twelve other companies bid for the job.

The project includes the collection of surface and upper air observations, development of forecasting and computing techniques, swift transmission of data, and suitable handing out of information.

Swift transmission of data will be a top objective of the network, since much of the unreliability of present weather forecasting is due to the time lost after observations are made. Says Air Force Col. George A. Guy, director of the Electronics Support System Project Office: "Weather becomes a more and more perishable commodity as planes go faster. It's important, therefore, to make information available within shorter periods of time, as well as improving forecasting techniques."

The prototype system is expected to be operating effectively by 1963. If it proves successful it may provide the basis for a revised national, or even global, system of weather forecasting.

United Aircraft is setting up a separate office in East Hartford to handle integration of the system. There also will be a high speed data processing center.

Teaming up with United in the project are: Dunlap & Associates, Stamford; Hermes Electronics, Cambridge, Mass.; Philco Corp., Philadelphia; Technical Operations, Inc., Burlington, Mass.; Tele-Dynamics, Philadelphia; Western Union Telegraph Co., New York; and Travelers Weather Research Center of Travelers Insurance Co., Hartford.

• • •

Group to Weigh Nationwide O.K. For Use of Sabin Live Virus for Polio

The same committee of the National Polio Foundation that, back in 1954, recommended general field trials for the Salk vaccine will be called back into session July 7 to consider whether a live-virus oral vaccine for polio should be O.K.'d for general testing in the U. S. Dr. Thomas B. Turner, dean of the Johns Hopkins medical faculty, is chairman of the group that will decide whether to apply for a National Institutes of Health test permit.

The vaccine under consideration is the much heralded development by Dr. Albert B. Sabin, of the University of Cincinnati. The Sabin vaccine, taken orally, is a live virus that causes immunity to polio without causing the disease itself. In the Salk vaccine, on the contrary, the virus is killed by formaldehyde.

So far, upwards of 4.5-million people have swallowed Sabin's vaccine without ill effects—in Mexico, Holland, Czechoslovakia, Malaya, and Russia, as well as Guadelupe, Ariz., and New York's Staten Island. The vaccine is tasteless and can be taken in milk, orange juice, or even candy. You need just one teaspoonful for immunity to each of the three types of polio virus; the doses should be taken a month apart.

The live virus is believed to give life-long immunity, unlike the formaldehyde-killed type. Some virologists even think that the immunity conferred by live virus may spread to persons other than those who have taken the vaccine, since a live virus tends to spread on contact.

Previous vaccination by the Salk method does not mean that later use of the Sabin vaccine would turn the patient into a walking carrier of the disease, as had been feared at one time (BW—Jun. 30 '56, p72). And babies a few days old can take it safely.

Production of the live vaccine is even simpler than the Salk type. A single pharmaceutical company could probably turn out more than 100-million doses a month, after a month of makeready time.

Emergence of another live-virus vaccine—cowpox was the first—has an importance transcending the prevention of polio. Knowledge gained in developing the Sabin vaccine should help in the long search for other live vaccines to cure other diseases—even perhaps cancer.

• • •

Newest Pep Pill Relieves Depression With Few Side Effects to Patient

Another in the series of so-called "mood elevator" drugs, designed to combat depression (BW—May 3 '58, p131), was made available to physicians last week. The drug, a phenelzine named Nardil, comes from Warner Chilcott Laboratories.

On the basis of tests with 6,600 patients treated with Nardil, the drug seems to be the first psychic energizer of its type with few serious toxic effects. In three out of four patients with true or endogenous depression, it produces a significant elevation of mood up to the point of normalcy—though, unlike many of the central nervous system stimulants, it will not raise moods above normal. In addition, it usually controls suicidal tendencies. The only complaint noted by doctors is a slight gain in blood pressure of a few of the patients in the experiments.

Medically, Nardil's most shining virtues are its speed (it works within about 45 minutes) and the fact that it should enable doctors to cut down tremendously on their current use of electric shock treatment for depression.

The drug has been under test since 1956. Researchers derived it from hydrazine, which was used to power the German V-2 rockets in World War II. In the human body, it appears to inhibit the production of monoamine oxidase, an enzyme, in the brain. Other energizers seem to work on monoamine oxidase when it collects in the liver.

Though it's difficult to figure how many people could benefit from Nardil or some similar drug, one estimate is that more than 3-million Americans are currently under treatment for mental depression.

Lower Hog Prices Are Cutting

But 1959 still will be a good year for the state as cattle prices remain firm and corn support prices rise.

While the rest of the country was just beginning to feel the effects of the business recovery last year, the Corn Belt was thriving on high livestock prices and high corn yields. This year, things will be slightly different. The business recovery is turning into a real boom, but lower hog prices will put a dent in Corn Belt farm income (chart, page 60).

Whatever holds for the Corn Belt applies particularly to Iowa. It is the nation's leading producer of livestock and corn. Since most corn is fed to livestock, the peculiar economics of livestock determine how the Corn Belt will fare. And unlike the more industrialized parts of the area, Iowa will find lower farm income offset to a smaller extent by the industrial boom.

• **Off, But Still Good**—This will not be a bad year for Iowa farmers. The corn crop may set a record. The federal government will pay a higher price for corn put into loan. Beef prices probably will remain firm. And the lower prices for hogs will be made up partly by the greater volume slaughtered.

In fact, 1959 suffers in comparison with 1958 only because 1958 was such a good year. In 1958, livestock prices were the highest in years, corn was the lowest, and Iowa farmers got the superb yield of 65.5 bu. per acre (against a 10-year average of 50.2).

In Iowa last year the high points of both the hog-raising and cattle-raising cycles just about coincided, helping to

MEASURE OF PERSONAL INCOME

STATE	Millions of Dollars				% CHANGE VS. YR. AGO
	1953-55 AVERAGE	APRIL 1958	(Seasonally Adjusted)		
			MARCH 1959	APRIL 1959	
Alabama	\$286.4	\$353.0	\$385.7	\$387.2	+ 9.7%
Alaska	41.9	50.7	58.3	55.9	+ 10.3
Arizona	126.9	175.4	195.0	198.5	+ 13.2
Arkansas	153.5	182.3	192.4	193.3	+ 6.0
California	2,341.7	2,975.3	3,274.7	3,296.8	+ 10.8
Colorado	217.2	284.5	313.4	314.5	+ 10.5
Connecticut	440.7	524.4	567.7	566.1	+ 8.0
Delaware	78.6	98.0	107.2	110.5	+ 12.8
District of Columbia	158.2	177.6	189.7	191.8	+ 8.0
Florida	456.8	642.9	704.7	722.0	+ 12.3
Georgia	383.2	454.4	490.2	489.5	+ 7.7
Hawaii	76.0	92.7	108.7	105.3	+ 13.6
Idaho	74.5	94.6	99.5	98.9	+ 4.5
Illinois	1,677.5	1,910.9	2,115.0	2,137.7	+ 11.8
Indiana	663.5	724.6	824.9	838.4	+ 15.7
Iowa	357.3	454.8	485.3	478.0	+ 5.1
Kansas	281.8	334.8	360.8	360.0	+ 7.5
Kentucky	307.1	345.4	367.2	366.7	+ 6.2
Louisiana	318.3	417.0	435.1	434.4	+ 4.2
Maine	112.8	132.0	131.2	137.0	+ 3.8
Maryland	432.3	517.7	570.1	572.3	+ 10.5
Massachusetts	799.8	934.4	1,012.7	1,010.1	+ 8.1
Michigan	1,234.1	1,306.3	1,449.3	1,480.8	+ 13.4
Minnesota	434.8	524.0	561.1	564.8	+ 7.8
Mississippi	160.9	197.3	207.1	208.2	+ 5.5
Missouri	600.9	688.3	740.2	746.9	+ 8.5
Montana	92.3	114.4	121.2	121.5	+ 6.2
Nebraska	182.5	242.0	252.9	251.8	+ 3.7
Nevada	43.1	53.7	62.4	62.3	+ 16.0
New Hampshire	75.2	86.3	94.6	95.6	+ 10.8
New Jersey	982.9	1,154.4	1,238.0	1,256.9	+ 8.9
New Mexico	91.8	118.6	127.2	127.1	+ 7.2
New York	2,887.9	3,381.6	3,515.0	3,566.3	+ 5.5
North Carolina	429.0	507.5	552.8	562.3	+ 10.8
North Dakota	67.4	84.8	87.2	86.7	+ 2.2
Ohio	1,476.3	1,627.2	1,815.0	1,862.2	+ 14.4
Oklahoma	268.5	312.6	329.9	331.3	+ 6.0
Oregon	249.8	287.5	317.4	316.5	+ 10.1
Pennsylvania	1,678.6	1,854.9	1,979.1	2,017.4	+ 8.8
Rhode Island	129.9	140.7	153.0	153.0	+ 8.7
South Carolina	210.0	232.8	256.4	256.2	+ 10.1
South Dakota	73.7	99.9	105.5	104.1	+ 4.2
Tennessee	345.9	401.6	443.3	446.4	+ 11.2
Texas	1,132.9	1,392.1	1,456.7	1,451.1	+ 4.2
Utah	98.1	122.3	137.5	137.2	+ 12.2
Vermont	45.9	51.3	56.2	56.5	+ 10.1
Virginia	383.3	529.8	555.0	561.0	+ 5.9
Washington	418.0	488.2	529.8	527.3	+ 8.0
West Virginia	209.7	248.5	271.8	270.2	+ 8.7
Wisconsin	528.2	608.3	653.8	657.2	+ 8.0
Wyoming	45.9	57.2	58.9	58.3	+ 1.9
NATION	\$24,363.5	\$28,791.2	\$31,117.8	\$31,402.0	+ 9.1%

April figures preliminary; March revised.

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Industrial States

U.S. incomes continued to climb in April despite a decline in farm income in some areas due to falling prices. According to BUSINESS WEEK's Measure of Personal Income, the nation enjoyed a 9.1% improvement over April, 1958, and recorded the biggest year-to-year gain since the recession's low point.

From Maine to Hawaii, purses fattened in varying degrees from 1.9% in Wyoming to 16% in Nevada. Twenty-one states bettered the national average. But some farm states, which scarcely had been aware of the slump last year, felt some discomfort this year as they watched costs mount while crop prices dropped.

• **The Big Gainers**—Industrial states

Into Iowa's Income

give the states a very prosperous year.

• **Supply Cycles**—Both cycles operate the same way, but the hog cycle is shorter and subject to wider fluctuations. It works like this: When hog prices are high, farmers are encouraged to raise more hogs during the next year or two; when all those hogs go on the market, they depress prices; lower prices lead farmers to cut production. That brings prices back up again. And another cycle of four years starts.

The cattle farmer has more leeway. Unlike the pig raiser, he can hold his animals back from market if prices don't suit him.

• **Demand Factor**—Demand as well as supply, of course, affects livestock prices. And here again, cattle have fared better than hogs. In the short-term, consumer demand for pork is stable. Unlike beef, pork demand does not rise with lower prices. In the long run, as consumer incomes have been rising, beef has grown in popularity.

It was the oversupply of cattle and hogs that caused both cattle and hog prices to hit postwar lows in 1956. Cattle prices fell to \$18.10 per cwt. Hog prices slumped to \$14.20 per cwt. With Iowa corn bringing \$1.31 per bu., the hog-corn ratio—the ratio of a 100 lb. of hog to a bushel of corn—fell to 11 to 1, showing that hogs were less profitable.

• **Rising Prices**—In 1958, however, as fewer hogs and cattle went to market, prices rose. Cattle soared to \$24.20 per cwt., highest since 1952, and hogs rose to \$19.70, highest since 1954.

To see what these figures mean, glance at the record for an average farm of 210 acres in southwest Iowa, as studied by Iowa State College.

• **Good Return**—In 1958, its net income was up 43% from 1957—to \$9,861

from \$6,870. The farm obtained \$24,206 from selling livestock and products, up \$7,896 from the year before. But it spent \$5,000 more on purchased feed and livestock. Through these statistics runs one particularly meaningful figure: The livestock return, as measured in terms of \$100 worth of feed used, rose to \$183 from \$156 in 1957.

• **Changing Outlook**—This year, the hog picture is changing. Prices already are running \$4 per cwt. below a year ago as a greater number of hogs are sent to slaughter. Likelihood of further reductions was increased last week when the Agriculture Dept. announced farmers intend to enlarge their fall pig crop by 9% over last fall's.

The temptation of farmers to want a good thing for too long leads Iowa State Prof. Francis A. Kutish to speculate that hog prices may be down to \$10 per cwt. by autumn 1960—or a 50% drop in two years.

Cattle raisers, on the other hand, are expanding their herds by holding cattle off the market. Thus, slaughter is about even with last year and prices are holding up. Unless a drought forces them to liquidate their herds sooner, Kutish doesn't expect cattle prices to drop slightly until late 1959 or next year.

• **Profitable Corn**—Growing corn under the government loan program on basic crops is another favorable factor in Iowa's farm income this year. Compared to the \$2.6-billion cash receipts from farm marketings last year—second only to California's—the \$60-million Iowa farmers received in government payments for programs such as the Soil Bank was relatively insignificant. But corn put into loan—in effect, a sale—has brought in an additional \$140-million.

This year Iowa farmers intended to



HOG PRICES are off 25% from last year as farmers send more pigs to market.



CORN CROP is likely to set an all-time record of 4-billion bu. this year.



FARM MACHINERY manufacture in Iowa is booming as farmers have cash to spend

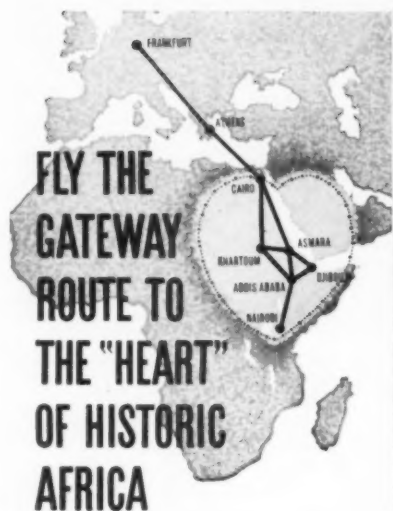
Are Making a Strong Comeback

continued to recoup losses, thanks to higher wages and almost 1-million more manufacturing jobs than a year earlier. The most striking improvement was in the Great Lakes region where Michigan, Ohio, Indiana, and Illinois were among the big gainers. These states reported impressive additions to manufacturing payrolls over the past year—140,000 in Michigan, 103,700 in Ohio, 67,900 in Indiana, and 50,400 in Illinois. Greatest gains in hardgoods centered in steel and motor vehicles; nondurables reported substantial increase in both rubber and textiles.

• **Squeeze in Texas**—In Texas, where incomes rose only 4.2% over last year,

the squeeze is coming from two sources. Heavy petroleum imports early this year, in anticipation of mandatory federal import quotas, created an imbalance in inventories that forced U.S. producers to curtail output. This resulted in 5,300 fewer jobs in this industry than in April of last year. In addition, changes in defense requirements caused big reductions in manned-aircraft manufacture. On the brighter side, the construction industry added 13,400 jobs and government and trade payrolls swelled substantially.

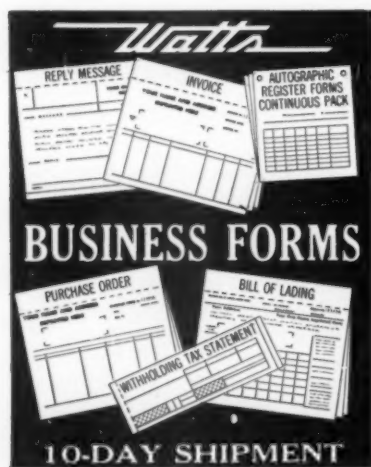
Cutbacks in some nonfarm industries on the West Coast, notably food processing and lumbering, failed to interrupt this region's vigorous uptrend.



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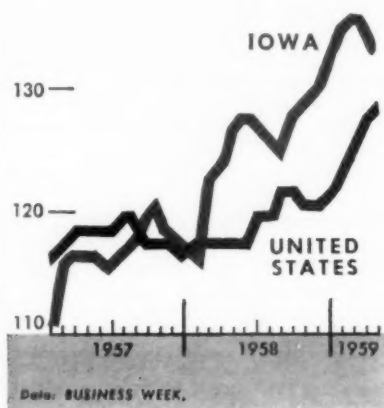
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1953-55 Average of Total Personal Income = 100



plant 19% more acres in corn than last year—partly because of the end of the Soil Bank and acreage allotment programs and partly because corn will be more profitable than soybeans or other crops. Since all that additional corn won't be fed to livestock, it's sure the higher government price (\$1.12, against \$1.06 per bu. last year) will attract more corn into storage under loans.

Farming accounts directly for about one-fifth of total personal income in Iowa. And while Iowa has become more diversified in recent years, a substantial share of the off-farm economy depends on farming as well.

• **More Spending**—The prosperity that farmers enjoyed last year has been seeping into cash registers across the state. Traditionally, farmers first reduce their debts and fix up their buildings after a couple of good years. Then they begin spending for new machinery and consumer goods.

This is what has been going on. Farm machinery manufacturers in Iowa have been so overwhelmed with orders that their employment is up 5,000 (to 24,000) from last year. Retailers such as Younker Brothers, Inc., with stores across the state, report sales are up substantially.

Profitable farming, combined with relative stability in the other segments of the economy—manufacturing, trade, services, government—cushioned Iowa against the recession. The state's unemployment did not go as high as 5%. The comparative strength of Iowa's manufacturing was due to its peculiar mix. Of 170,000 manufacturing em-

ployees, 75,000 are in food processing and farm machinery. Of the 10 largest employers in manufacturing, six are meat packers, two make farm machinery.

• **Employment Picture**—One of the brightest spots in Iowa's employment picture is Cedar Rapids. Though its unemployment rose to 5.9% during February, 1958, it dropped quickly. For the past year it has ranged between 2.8% and 1.4%—the most recent level.

The Cedar Rapids labor market has been strengthened by a fortuitous combination of industries: food processing, construction machinery, and electronics. Their attractiveness to workers from farms and surrounding states has continued to expand the area's labor force. Even with a larger labor force, their hiring has held down unemployment.

Throughout the recession, as food consumption held up, employment in grain and meat processing plants remained fairly stable. In the long term, addition of new product lines should make up for layoffs that technological advances would bring.

Construction machinery plants have benefited mostly from the nationwide highway building boom. Production is only now hitting its stride, said Link-Belt Speeder Corp.'s Pres. D. W. Lehti, and employment could go up another 10%.

Collins Radio Co., which started in Cedar Rapids, now is operating with 6,100 workers—more than its pre-recession level. During the recession it had to cut back about 15% of its work force, but defense and commercial aviation orders have kept its production and engineering divisions humming.

As part of the huge industrial complex of which Chicago is the heart, eastern Iowa generally should obtain new industries in future years. Projections of recent trends in both farm and non-farm employment—which consider the continuing decline in farm labor—show that southeast Iowa will continue to have the tightest labor market in the state for as long as 1965. The only other area coming near it is the Des Moines area, where a concentration of government and insurance companies provides sizable employment.

• **Outmigration**—On balance, the state as a whole will continue to be unable to provide employment for all the people entering the state's labor force, according to these projections. Farm productivity simply has increased so dramatically that fewer and fewer hired workers and children of farm operators will be required to work the land. Iowa has had some success in state and community efforts to attract new plants, but altogether they have not been able to absorb enough of the surplus labor to slash outmigration of Iowa's young people. **END**



PHOTO BY KAREN OF OTTAWA

"Supplier interest is what makes Sharon Steel important to us"—L. F. SMITH, Erie Plant Manager, A. O. Smith Corp.

"We of A. O. Smith take unusual pride in our products," says L. F. Smith, Erie Plant Manager of the A. O. Smith Corporation, "and we like to see our suppliers share this interest."

"We are extremely proud of our new line of gasoline pumps for they combine appearance, ease of operation and low maintenance into a real standout product. Our people tell me that the design, production and purchasing functions were made a great deal easier because of the sincere concern and help of such leading suppliers as the Sharon Steel Corporation, Sharon, Pa."



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In Regions

• • •

State Redistributes Legislative Seats To Take Care of the Farm-to-City Shift

Twenty-three states have not reapportioned seats in their legislatures since 1950—thus ignoring the farm-to-city shift of the population and provoking complaints that cattle are better represented than people.

This month, the Minnesota legislature yielded to pressure that began with the 1950 census to redistribute seats that haven't been changed since 1913. (Vermont's last reapportionment dates back to 1793, Delaware's to 1897.)

Under the new law, five state Senate seats and 10 House seats are taken away from rural areas and given to the Minneapolis-St. Paul metropolitan area. However, the House was enlarged by four seats (to 135) to provide new representation for other urban areas.

The redistributing campaign was conducted largely by the League of Women Voters and by Alf Bergerud. As representative, Bergerud got the House to go along twice; this year, as freshman senator, he was able to bring the Senate across.

Two factors helped the campaigners:

- A federal court decreed last July that it had jurisdiction in a suit brought by four citizens (under the 14th Amendment) who claimed they were not properly represented. The court, however, decided to wait to see if the 1959 legislature would act.

- Rural legislators' recognition that failure to reapportion now would oblige them eventually to settle under the less favorable (to them) 1960 census.

From the cities' standpoint, the legislation is not ideal, but represents a step. They could benefit from passage in 1960 of a constitutional amendment—put up to the people in another legislative action—that would freeze for the Twin Cities metropolitan area 35% of the Senate, require the legislature to reapportion the House every 10 years—even if members had to stay overtime without pay to do the job.

• • •

On Signal, Food Merchants All Move From Philadelphia Area to Be Rebuilt

The merchants of Philadelphia's 200-year-old Dock Street wholesale food market closed their doors last week and moved south of downtown into the new 388-acre Food Distribution Center.

A rat-infested eyesore, the old market had encouraged blight around it, had congested streets with its truck traffic, had blocked the city's efforts to restore the historic section around Independence Hall.

Nothing was done to eliminate it until 1953, when the Greater Philadelphia Movement, a business group, took on the project. It formed Food Distribution Center, Inc., raised \$250,000 among its members, got

Penn State University's Agriculture Dept. to help find a new site, and enlisted City Hall's collaboration.

Once the new site was spotted—an old dump handy to all means of transportation—the city appropriated \$15.5-million to acquire and prepare the land. To start building produce and seafood stalls in the first section, the city lent FDC \$1.5-million and private lending institutions added \$3-million (for 20 years at 5%).

The only remaining problem was to compel all Dock Street merchants to move at once—so that the two markets wouldn't compete. That was achieved by the city's condemning the area. By purchasing the properties, the City Redevelopment Authority provided the merchants with the money for moving expenses. The authority will get its money back when Dock Street is converted into a fashionable residential area.

• • •

Californians to Vote on Sharing North's Water With South's Dry Farms

California moved one step closer last week to having its northern half share its abundant water with the water-poor agricultural counties in the southern half.

The Legislature approved a bill putting on the ballot in November, 1960, a \$1.75-billion bond issue—biggest in the state's history—to pay for the long-debated scheme. Gov. Edmund G. (Pat) Brown had made the controversial plan the core of his first legislative program.

The program evoked bitter partisan and sectional debate. Northerners wanted to be sure their area's growth wouldn't be stunted by letting water go south; Southerners demanded guarantees of firm supply.

• • •

Last of the Big Three Meatpackers Stops Slaughtering in Chicago

Chicago's decline as a national meatpacking center will be underscored this summer when the last of the Big Three packers—Armour & Co.—stops slaughtering there. Swift & Co., which quit hog slaughtering in 1952, this month killed its last cattle in Chicago. Wilson & Co. ended both hog and cattle slaughter there in 1955.

Since 1920, according to the Federal Reserve Bank of Chicago, the city's share of cattle slaughter has declined from 15.3% to 4.7%; its share of hogs dropped from 13.1% to 2.6%. Armour's explanation is typical: obsolescence of buildings, shifts in livestock numbers, excess packing capacity.

Whether these moves will hurt the stockyards' volume remains to be seen. Swift and Armour continue to buy there, and stockyards officials say that in recent years smaller packers have made up for lower purchases by the Big Three. Hog buyers prefer to buy closer to their packing plants because hogs suffer more from a long transport haul, but Chicago remains a concentration point for cattle. Cattle need to be graded individually, and the Chicago yards claim that farmers prefer to bring prime cattle there—no matter whether they are shipped East for slaughter.

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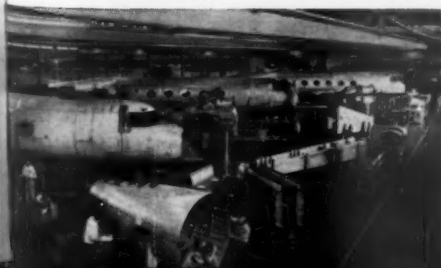
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Options More Popular Than Ever

● Incentive plans for executives, offering stock at marked-down prices, are spreading in the bigger companies. So are outright stock purchase plans for the rank and file.

● Ways are being found to get around the one big drawback of executive stock option plans: the fact that the executive must put up a lot of his own money to benefit.

● Stock purchase plans are also encouraged by many companies, though others fear the element of risk.

With the stock market running high, stock options for employees—particularly the management people who are in the best position to make a company prosper—are at a peak of popularity right now.

In 1955, a survey of companies by the National Industrial Conference Board showed that 40% had options in effect. Answers to a recent NICB survey of 673 companies listed on stock exchanges have just been tabulated, and they show a startling increase to 68.9%—that's 464 corporations.

Participation might be even higher except for the market's own counter-currents: To make use of an option, an executive must have the money to buy the stock, whatever its price, and market prices are high, margin requirements stiff.

Thus, in March, stockholders of Union Carbide Corp. approved a new executive incentive plan—similar to those introduced two years ago by du Pont and General Motors—that gives key management people the dividend benefits of stock ownership without their having to pay for stock. For those who also want to share in the gains in market price of stock, the plan permits them alternatively to exercise options on an equivalent number of shares.

• **Option Plan**—A typical stock option plan for executives is based on offering him long-term capital gains at a 25% maximum tax rate rather than current cash for which he would be taxed at much higher ordinary income rates. It gives him the right, over a term of not more than 10 years, to buy a specified number of the company's shares, at a price as low as 85% of the market value at the time the option is granted (though most plans require around 95%).

If the stock fails to rise, or instead declines, he need not exercise his option to buy; if it rises, the executive makes a capital gain—providing he doesn't

sell in less than two years from the date the option was granted or in less than six months from the time he picked it up. He doesn't lose on a falling market, except on stock he already owns, but he has an incentive to make the company thrive.

Some corporations tend to extend the benefits of such plans down through the management ranks, even to the lower-middle levels. They also reflect rank-and-file interest in stock ownership by offering increased numbers of employee stock purchase plans, some providing little more than bookkeeping service of payroll deductions and others as part of generous "thrift plans" (BW—Sep. 6 '58, p. 54).

• **Still Confident**—The stock market break of late 1957 discouraged neither the companies nor the employees in option and purchase plans (BW—Nov. 2 '57, p. 125), and the rebound of the market has strengthened their confidence.

In a rising market, executive stock option plans, of course, can be added compensation that's even sweeter than cash. But there is also an increased interest in employee purchase plans, the New York Stock Exchange says.

For example, Westinghouse Electric Corp. just last month authorized 400,000 additional shares for its employee stock purchase plan, which had been dropped in 1955 only to be restored in 1957 in answer to employee requests. Participation, says Westinghouse, is now the highest ever.

I. New Plans in f e

Last month's crop of annual meetings give a clear view of which way option programs are going. In one week alone, stockholders of eight companies approved plans that ranged from 400 shares to "two key associates" at Electronic Associates, Inc., to 60,000 shares at Coleman Co.

Others approved in the same week: Sinclair Oil Corp., Lefcourt Realty Corp., Chicago Great Western Ry., Henry Holt & Co., Financial General Corp., and Drackett Co.

• **Broadened Base**—The broadening base of the option plans also shows up in other recent actions.

American Viscose Corp.'s plan put out last year covers 85 executives, compared with 50 in its first option plan in 1950. A big greeting card manufacturer, a food packer, and a large Canadian mining concern have also expanded their programs recently to bring in more executives on the middle rungs of the corporate ladder. One Midwestern company that has merged with an outfit about one-fifth its size has increased its number of option holders from 13 to 208 since 1956, but it insists that the increase merely reflects the merger.

Rexall Drug & Chemical Co. dipped into the option business 18 months ago by granting three options, now has eight outstanding and is planning to extend the program still further. Federal-Mogul-Bower Bearings, Inc., of Detroit and Packard-Bell Electronics Corp. of Los Angeles are among the companies that are considering plans to expand their option programs.

II. Paying for Shares

Few option holders fail to take advantage of their chance to pick up shares at a bargain price. For example, out of 576,200 shares on which options have been offered by Safeway Stores, Inc., only 11,200 have lapsed.

Even so, paying for the shares under option can be "the single most important problem today" in the compensation field, says V. Henry Rothschild, New York attorney and expert on management compensation.

• **Narrow Margin**—Under Federal Reserve rules, a broker can give credit to a buyer of stock only up to 10% of the shares' market value, and banks are held to the same amount. If the market price has zoomed above the option price, the executive may be able to put more than 10% on the cuff. A stock optioned to him at \$85 may have risen in the market to \$110, but he still can borrow 10% of the market price—in this case, \$11 toward his purchase price of \$85.

Unless the stock has risen sharply, though, the executive—unless he works for a company that will loan him the money to buy the stock, or that will arrange installment payments—has a fund-raising problem in taking advan-

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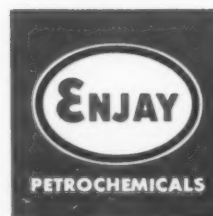
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tage of options. Some are reportedly borrowing the rest of the money on "unsecured" loans from banks, depositing the shares at the banks "for safekeeping," with letters authorizing the banks to sell the stock if the loans aren't repaid. But many banks regard this as an evasion of the margin rules and refuse to do such business.

• **Union Carbide Plan**—This is the problem behind Union Carbide's change in its stock incentive plan. The old plan, in effect since 1946, offered blocks of stock to specified executives, who could pay for the shares over five years under a contract that constituted a firm obligation to buy.

Under the new plan, Union Carbide might, for example, award 1,000 dividend equivalents to a vice-president, along with an option to buy 1,000 shares of stock. Without having to buy the stock, the executive would receive the equivalent of dividends on 1,000 shares until he quit or died. (The plan continues for him in retirement.) Or he could buy shares under the option; as he picked up stock, the number of dividend equivalents would be reduced by an equal amount.

This way, the executive doesn't have the problem of laying out capital, yet still has the incentive to improve the corporation's dividends. The Union Carbide plan sets a limit of 1,504,659 shares (5% of the outstanding) on stock options in its five-year life, and it retains the choice of issuing either straight options or dividend equivalents, with or without options, as circumstances dictate.

Bethlehem Steel Co., long noted for large cash bonuses for executives, last week announced a dividend equivalent plan for executives (BW—Jun. 20 '59, p38), but it has no stock option provision.

III. Who Gets Options

Rothschild points to a special problem for companies whose stock has risen to the point where option plans offer little incentive—the profits may already have been made, or the stock may be vulnerable to a dip in market price.

Most companies have written into their plans a clause based on the 1954 laws regulating stock options. If a stock sells for a year at an average price less than 80% of the price on the date the option was originally granted, the company can reduce the option price.

There are few cases where this provision has yet been invoked. However, during the 1957 stock market break, a Midwestern chemical company took an even simpler step to keep the options from becoming worthless pieces of paper. It called in its outstanding options at \$69.50 a share and issued

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new ones to the same men at \$49.75.

Most options go to the top echelon of management, where income is high enough for the tax advantages to be significant. One big Southern company calculates that an option to a man earning less than \$15,000 is more costly to the company in paperwork than it is worth to the man.

Union Carbide is restricting its new plan to the top 200 executives who make the major decisions. For men on lower levels of salary, it thinks a cash reward is more meaningful.

"There's no value in giving stock options if you don't restrict them to the top echelons," says Henry W. Harding, president of Laboratory for Electronics, Inc., in Boston. Options aren't gifts or extra pay, he says, but "should provide extra incentive for the small number of people who really contribute to the company—those officers who are willing to put in 18 hours a day and sit up all night on a plane."

• **Backfires**—Another Boston company that's heavy in scientists has had an unexpected experience with options for its important employees.

"Quite a few scientific personnel don't appreciate the value of stock options," says David D. Nickerson, treasurer of National Research Corp. "We've had to call them and tell them their options were about to run out. One scientist had to be talked into exercising his option even though the stock was his at \$6 while the market was up to \$18."

From St. Louis comes a report of an outright backfire of stock options as a device to keep the brightest men interested in a company's future. In this case, the corporation's stock rose so fast that some of the youngish executives cashed in their options and retired prematurely.

IV. Stock Purchase Plans

For rank-and-file workers, most managements prefer a straight stock purchase plan to the more complex option idea. Most such plans amount to no more than installment purchases of stock through payroll deductions. And you have to go back to the 1920s to find comparable interest in such plans among the wage-earners. But many companies still sweeten these plans.

A Toronto food company, for example, gives employees one free share of stock for each five they buy. A giant Pittsburgh company's thrift program calls for the company to put up 50¢ for each dollar invested by an employee, with the employee electing whether the total amount is invested in government bonds entirely or partly in company stock. Both companies report employee participation up.

A year ago, Campbell Soup Co.

offered a similar plan to all employees, "so the top executives wouldn't run off with all the cream." Employees invest up to 5% of their earnings (a maximum investment of \$125 a month) and Campbell puts in 40¢ for each dollar. The employee has the choice of whether the money goes into government bonds, a trust fund, or Campbell stock; 1,657 shares of Campbell have been bought through the plan.

Usually, the sweeter the plan, the higher the participation. Dow Chemical Co., which gives employees stock at 85% of the market price, has 39% of the eligible employees signed up in the current offering. The more generous "thrift" plans get more employee interest. When a West Coast aircraft company recently rounded up information on 23 of these plans, it found eight with over 9% participation—and one with 99%.

Sometimes employees don't even have to pay for the stock. Last December, Standard Financial Corp. gave free shares of its stock to all non-executive employees, along with their usual year-end cash bonuses.

• **Installment Plans**—Around 10 companies are signed up with the New York Stock Exchange's Monthly Investment Plan, including American Motors Corp., Canada Dry Corp., National Fuel & Gas Co., De Vilbiss Co., and Carborundum Co. None contributes anything to the purchase except the bookkeeping for payroll deductions.

Stock purchase plans of this sort, offering nothing more than the convenience of payroll deductions for installment buying of shares, are growing in popularity, and employees of other companies are asking for them.

Stockholders of Pacific Gas & Electric Co. last month approved a plan for their employees, which the company thinks is the first in a major utility. And two big banks—Bank of America and Atlanta's Citizens & Southern—have established plans in the past year. Up to now, utilities and banks have been conservative about going into such plans.

• **Risky Business**—Many companies, however, hold out against encouraging workers to invest in stocks. They remember the ill will that was created when the market crashed in 1929, when some workers still owed more in installments on company shares than the stock was worth on the market.

"Let's face some facts—we are in a hazardous business," Pres. William M. Allen told the Boeing Aircraft Co. annual meeting last month. "One day you're a prince and the next, a pauper. I, for one, hesitate—and management hesitates—to establish a program of selling stock which might appear to be an inducement for our employees to invest. It's just too risky." **END**

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The Typical Manufacturing Company Director:

- is 58 years old
- is a company officer, or else a banker or lawyer
- has 10 fellow directors
- comes to board meetings no more than once a month
- serves on an executive salaries or stock option board committee



The Typical Nonmanufacturing Company Director:

- is 62 years old
- is the president of another corporation
- has 14 fellow directors
- comes to at least one board meeting a month, often more
- serves on no standing board committees

Managers Fade as Directors

Management majorities on boards of directors are getting less common in American industry. However, they still turn up in manufacturing companies a good deal more often than in utility, transportation, banking, and insurance companies.

Surveying corporate directorship practices in 925 companies, the National Industrial Conference Board and the American Society of Corporate Secretaries, Inc., find that the trend toward more use of outside directors (BW—Mar.12'55,p101) is continuing. The report just published by NICB is its sixth on this subject. Half the manufacturers surveyed in the first study, made in 1938, had management-dominated boards; now only 43% do.

But the manufacturers are still far from conforming with the pattern of the other companies that were surveyed. Outside directors form a majority on the boards of 85% of the non-manufacturers, including 90% of the banks. Employee directors hold only 25% of the board seats in the non-manufacturing companies studied, compared with 46% in the manufac-

turing companies. The size of the company has little effect on these percentages.

• **More Directors**—A number of other differences between manufacturing and non-manufacturing practice emerge from the NICB study. There is the size of the board, for example. The boards of manufacturing companies average 11 members, although the trend is to make them larger. Utility and transportation company boards average 12; banks and insurance companies, 16. Manufacturers seem to put more stress on having an odd number of directors—to avoid tie votes.

• **And Younger Ones**—Besides being smaller, manufacturing boards are younger. The average age is 58, compared with 62 for the utility, transportation, and financial group. However, somewhat fewer of the manufacturing than of the non-manufacturing companies make their directors retire at a given age. Only one out of seven manufacturers has compulsory retirement for inside directors, compared with one out of six non-manufacturers; only 10% of the manufacturers enforce retirement

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PROOF OF BETTER ENDURANCE—In salt spray test, metal panels were coated with primers and finish coats and scribed to bare metal. Panels were then subjected to salt spray test for 500 hours. "Conventional" panel had severe blistering and under-film corrosion. RUSTMASTER restricted corrosion to scribed area, proving higher anti-corrosive qualities.



PROOF OF BETTER PROTECTION—Primers were applied to rusted metal panels and exposed to weatherometer test for 1600 hours. Scraping of both panels with knife blade showed that conventional primer pigment remained on the surface of the rust. RUSTMASTER vehicle and anti-corrosive pigments were bound into the rust, proving deeper penetration, more protection.

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of outside directors, compared with 14% of the non-manufacturers.

On the other hand, among those companies that do have mandatory retirement for directors, the age is higher outside manufacturing—between 70 and 72 for both inside and outside directors. Manufacturers are more likely to retire employee directors at 65, outside directors at 70.

• **More Committees**—Manufacturing companies tend to have a larger number of board committees. Groups dealing with stock options and executive salaries and bonuses, especially, are more common among manufacturers.

Although meetings are most often monthly in both classifications, 44% of the manufacturing company boards meet less than 10 times a year; only a quarter of the non-manufacturing boards meet so infrequently.

• **Directors' Pay**—Directors of utility and transportation companies are paid a median of \$200 per meeting; the median for all other companies is \$100.

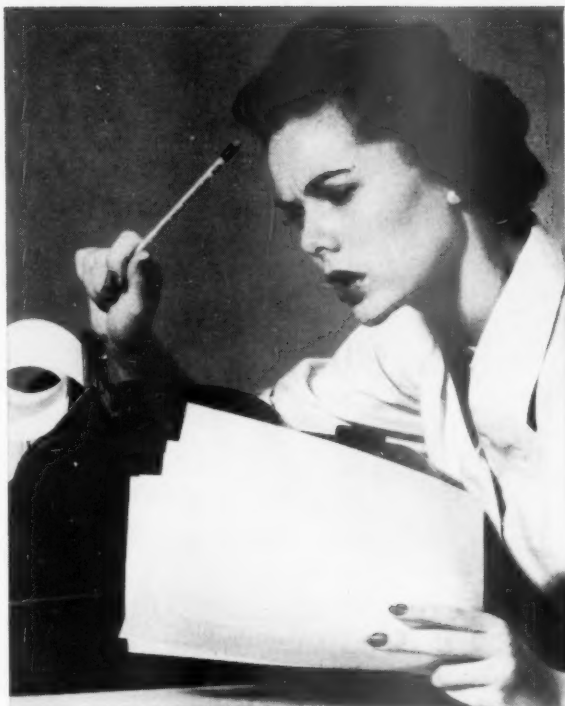
Paying directors an annual retainer is a growing practice in manufacturing companies. About 30% of those surveyed by NICB do that now, compared with only 12% in 1938. Generally, the retainers total at least \$2,400 a year; the range is from \$1,200 to \$10,200. In the use of retainers, manufacturers are far behind utilities (70% of utilities pay them) but far ahead of insurance companies (16%) and banks (not one of those surveyed).

Many of NICB's conclusions, of course, apply equally to manufacturing and non-manufacturing companies. For example, the report notes that directors generally are being paid more than they were when the first survey was taken in 1938. Most companies also reimburse outside directors for the expenses they incur in attending board meetings, but only 10% let them participate in any employee benefit plans.

Only four of the companies surveyed use the tontine system (by which the total fees due for a given board meeting are split among the directors who actually show up). And only one company links directors' compensation to profits—largely because, as one respondent explained, there is not "enough direct contact between the directors and the company's operations."

• **Big Stockholders**—Women are directors in only a handful of companies. In most cases, they are or represent substantial stockholders. The same is true of about one-third of all the outside directors covered in the survey. Boards dominated by non-officer representatives of large stockholdings are nearly twice as common among non-manufacturing companies as among manufacturers.

Outside directors without large stock interests are usually bankers, lawyers, or officers of other concerns. **END**



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In Management

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You Can't Run a Professional Group Like a Business, Sociologist Warns

Administrators of research institutes, universities, and hospitals should not try to run their organizations by theories borrowed from business management, Amitai Etzioni, Columbia University sociologist, suggests in the current issue of *Administrative Science Quarterly*. Some principles of business organization, he says, do not apply to professional organizations—and probably not to labor unions, churches, and political parties.

For example, **traditional concepts of staff and line must be reversed in a professional organization**, according to Etzioni. In industry, staff experts serve the line managers; in professional organizations, it is the experts who carry out the principal activities while the "line" plays a service role.

The corporation, says Etzioni, has only one internal center of authority; in a professional organization, authority is highly dispersed. Managers with administrative backgrounds predominate among corporation heads, while heads of institutions are most often "semiexperts" (specialists with "managerial personalities").

. . .

Picking a President by Lottery For a One-Year Turn at the Top

Hiram Haydn won the presidency of Atheneum Publishers by drawing straws with two other candidates. But he'll keep the office for only a year, then step down to a vice-presidency for two years while each of the other men takes his turn in the president's chair.

Atheneum decided on this unusual rotating presidency to solve the problem of who should have the legally required top title in a company founded by three men with equal stock interests. The two presidents waiting in the wings are Simon Michael Bessie and Alfred Knopf, Jr., both—like Haydn—executives at other top publishing companies before forming Atheneum this spring (BW—Apr.11'59,p57). Four others hold stock.

. . .

Koppers' Stock Bonus Gets O.K.; Differs From Plan Rejected by Court

Executive bonus awards tied to stock prices, held illegal in a court case a year ago (BW—May31'58,p48), have gotten support in a new decision handed down by a county court in Wilmington, Del. The court upheld a bonus plan at Koppers Co., Inc., that awards executives "stock equivalents." Under this plan, the executive collects dividends and—this is the vital point—gets the

difference between the stock price at the time of award and the market price when he retires—if the stock has appreciated. No actual stock is involved in the plan, only company guarantees.

In the 1958 case, a Federal District Court in Cleveland threw out a similar plan at Consolidation Coal Co. **In so doing, it put under a cloud the entire practice of deferred management bonuses based on stock performance.** The Koppers plan differs from the Consolidation Coal setup in two important points:

- Koppers stockholders approved the plan in detail (in the Consolidation Coal case, stockholders hadn't been given full details on the plan).

- The "selling date" is the specific date the executive retires (in the Consolidation Coal case, the executive would choose any date he wanted within two years of his retirement).

But the Koppers plan still rewards the manager for an increase in stock price. The Cleveland decision called this "an unreliable index of the value of services rendered."

. . .

Management Briefs

Corporations have given more than \$800,000 to colleges and universities since 1955 under the American Alumni Council's **program for corporate matching of gifts by alumni in their employ.** Sixty-nine companies are now participating, the Council says. Most of them require that the gift to be matched must be made by the employee from his own funds, and nearly all set maximum limits, usually \$500 to \$1,000.

Chrysler Corp.'s Canadian subsidiary and Aluminium, Ltd., are joining together in a new Canadian company to make aluminum alloys for Chrysler plants in that country and the U.S. Dubbed Chryslum, the new outfit will be owned **51% by Chrysler, 49% by Aluminium,** which will operate the 36,000-ton smelter leased by the new concern.

Corporate financial officers don't see depreciation policies as short-run influences in determining capital spending, according to a University of Indiana survey of 150 executives in 51 companies. The officers supported the view that depreciation was an important factor in determining long-range spending, but gave it little weight in short-term figuring. They rejected the idea that a liberalized depreciation policy would be useful as a quick anti-recession measure.

Henry J. Kaiser is stepping out of the top spot at four companies in his vast industrial empire. He will move from the job of chairman and president of Kaiser Steel Corp., Kaiser Aluminum & Chemical Corp., Permanente Cement Co., and Willys Motors, Inc., up to the new post of founder-chairman. In each outfit, he will be succeeded by his son Edgar as chairman and E. E. Trefethen, Jr., as vice-chairman. The general manager of each subsidiary becomes president and chief executive officer. Henry J., now 77 and spending most of his time in Hawaii (BW—Sep.14'57,p152), keeps the chairmanship of Kaiser Industries Corp., the parent company, and all remaining subsidiaries.

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Columbus Bolt & Forge
291 Market Boulevard
Columbus 13, Ohio

George E. Chan
Sales Application Engineer
Alco Products, Inc.
1 Nott Street
Scarsdale 3, New York

Harold A. Clymer
Development Operations Manager
Smith, Kline & French Laboratories
1500 Spring Garden Street
Philadelphia 1, Pennsylvania

J. M. Crowe
Administrative Assistant
The Sunday School Board, SBC
127 Ninth Avenue North
Nashville 3, Tennessee

H. King Cummings
President
Guilford Woolen Mills Incorporated
Oak Street
Guilford, Maine

J. C. DeJong
President
J. C. DeJong & Company, Incorporated
105-21 Union Hall Street
Jamaica 33, New York

Calvin R. Depey
Vice President
A.S.R. Products Corporation
Box 500
Staunton, Virginia

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Vice President
Dun & Bradstreet, Incorporated
101 Church Street Station
New York 100

FUNDAMENTALS OF MARKETING FOR NON-MARKETING EXECUTIVES

Designed to broaden the business perspective of any executive who does not perform a day-to-day marketing job, this special AMA Orientation Seminar will be of special interest to

- presidents and general managers
- executive vice-presidents
- financial, manufacturing, research, and engineering executives
- executives performing a limited marketing or sales management function

...who wish to develop a keener understanding of the "mission" of modern marketing, how it actually functions, and how it relates to the total corporate activity.

AMERICAN MANAGEMENT ASSOCIATION

Comptrollers, engineers, and others get two-day dose of "Marketing Concept"; they rebel—but end enthusiastic.

Engineers bristled and comptrollers balked at an American Management Assn. seminar last week. They had just heard a top AMA official predict that "every company president elected from 1965 on will be a marketing man."

The forty-odd conferees had come to attend an experimental two-and-a-half day seminar entitled Marketing for Non-Marketing Executives, aimed at the groups described in the prospectus at the left. They came from a variety of posts—presidents, research managers, financial men, technical experts.

The men were expecting to get a bird's-eye familiarity with the field of marketing. What was asked of them was something quite different—acceptance of a Marketing Concept, the idea that marketing considerations permeate all phases of business activity and that distribution has displaced production or research as the prime problem facing the U. S. economy.

• **Roster**—Why did the non-marketers come—and just who were they? Comptroller William F. Brackman, of Gillette Safety Razor Co., came "to learn to work more effectively with our marketing personnel." Pres. Brackett Parsons of Pepperell Mfg. Co. attended at the urging of his sales vice-president. Though Parsons' background was in production, he indicated that sales questions were looming more important even for such a once-staple product as sheets: "Stripes and colors have transformed a staple like a sheet into a style product."

There were representatives of some surprising specialties, too. Robert Cobb, Jr., who acts as executive vice-president of Cobb Pedigreed Chicks, Inc., Concord, Mass., was eager to learn selling techniques applicable to the chicken breeder business. Said Cobb, "We've become all too efficient at the production end—just look at the price of eggs." J. M. Crowe registered for the Southern Baptist Conference. This hard-sell branch of the Baptists has put many religious book salesmen through AMA's regular marketing course, now wants its administrative men, too, to understand marketing thinking.

Some ringers also showed up. Top marketing men from Sylvania Electric Products Co. and W. R. Grace & Co. listened in, with a view to setting up similar programs in their companies.

• **Shock Tactics**—AMA faced a tough



**PRIVATE
FLEETS
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CUMMINS!**

*Special report on
over-the-road power
from 4 famous
American companies*



Krafibre



Borden's

CUMMINS DIESELS CUT PRIVATE FLEET

Many businesses operating their own fleet of trucks are experiencing a new kind of profit, thanks to the efficiency of Cummins Diesels. Unlike common carriers, private fleets do not depend upon the revenue to be gained from the hauling of goods and materials.

These companies use their trucks to perform a necessary service. And one of the most important considerations, if not the most important, is reduced operating costs. The four companies, whose insignia you see above, for example, operate Cummins Diesels in important phases of their manufacturing-marketing service. Their experience has taught them that Cummins Diesels can provide low-cost, dependable power . . . the kind of power that stands any test.

COLUMBIA BOX BOARD MILLS INC., Chatham, New York, keeps a fleet of 12 Cummins-powered trucks busy hauling rolls and sheets of box board through the Middle Atlantic area and the New England states. Their satisfaction with Cummins is due to dependable operation, improved service and reduced operating and maintenance costs.

SAFEWAY STORES, INC., Denver, Colorado. The Denver Division of Safeway Foods uses their Cummins-powered units to deliver food products from warehouse to stores throughout the vast Denver region. The efficient operation of the Cummins engines helps maintain on-time deliveries no matter what the traffic and weather conditions.

SAFEWAY FOODS



OPERATING COSTS TO A NEW LOW!

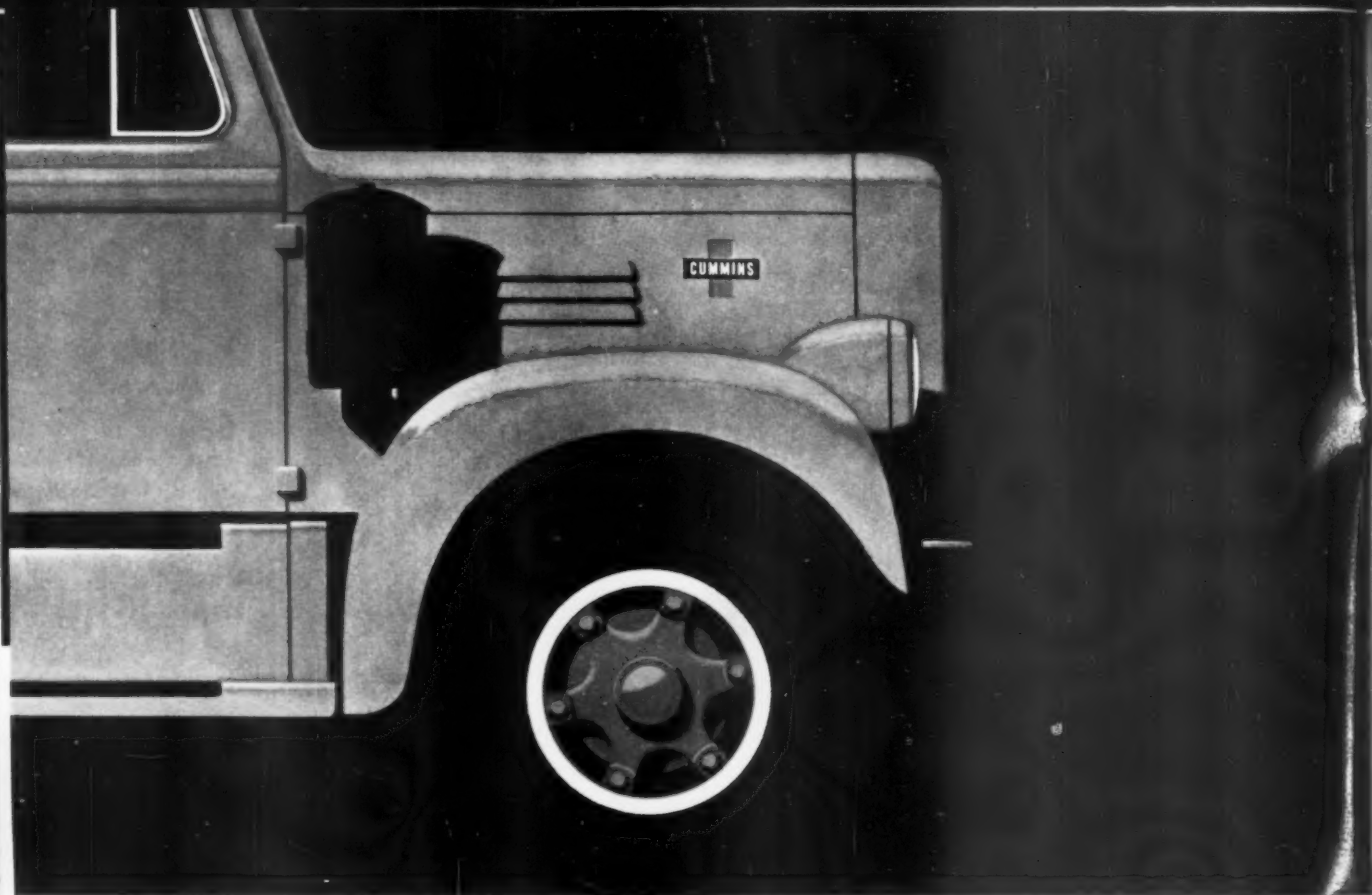
THE BORDEN COMPANY, Detroit, Michigan. This famous concern is operating 15 Cummins-powered dairy trucks in the greater Detroit area. A long-time Cummins user, they are sold on the dependability and reliability of these engines. Low cost per mile is an important advantage they get with Cummins Diesels.

BLUE BELL INC., Greensboro, North Carolina. World's premier manufacturer of work and play clothes, including such famous brand names as "Wrangler," "Sedgefield" and "Jeanie," recently put 19 new Cummins-powered units into cross-country service. They consider the models powering these units to be "million mile plus" engines. They are sold on Cummins dependability and economy.

Why don't you get the advantages of Cummins power for your fleets? Twenty-seven models—from 70 to 335 horsepower—are available for any truck application. Each has the features that have made Cummins the popular truck diesel in the world!

In fact, Cummins powers more new trucks than all other makes of diesels combined! Operators, who depend on diesel trucks for their income, know Cummins gives them greater efficiency, lower operating costs, more miles of trouble-free service.

The following page will give you more specific information about the advantages of Cummins power. Better yet, why don't you see your Cummins Distributor today?



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- Cummins Service is second to none. Over 350 Cummins service and parts locations throughout the United States and Canada means help is available whenever and wherever you need it. They are your repowering headquarters.



CUMMINS ENGINE COMPANY, INC., COLUMBUS, INDIANA

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OVERSEAS FACTORY — CUMMINS ENGINE COMPANY LTD. — SHOTTS, LANARKSHIRE, SCOTLAND

question in setting up a syllabus for the short two-and-a-half day seminar. What do you say about marketing in such a mix of companies? AMA decided to cover the whole range of marketing activities for both consumer and industrial products. It assigned this formidable task to a blue-ribbon panel of its speakers headed up by Pres. Robert Dick of George Fry & Associates, Inc.

Dick didn't ease his non-marketing audience into the subject. He shocked it into recognition of the marketing concept as a revolution in company organization. He pounced on the confusion between selling and marketing as illustrating old and new concepts of marketing's role. "The sales manager was the guy who was told here's a product—now go out and sell it—the marketing manager must consult, must concern himself with every step affecting the ultimate salability of a product." For Dick, these steps stretch from the first efforts at product conception to its ultimate usage by the final customer.

Dick's introduction of the marketing concept made his audience thoroughly aware that the seminar would offer no mere inspection tour of another function in management. His espousal of the marketing-oriented organization was echoed by each speaker.

For the next two days the audience was conducted on a whirlwind trip which started with marketing's expanded role in organization structure, explored changing patterns of distribution, and ran through marketing activities.

• **Research vs. Fast Bucks**—Dietrich Leonhard's development of marketing research illustrates the methods of presentation. Leonhard, a consultant with the Fry company, sounded a recurring theme when he stated "business must reorganize along marketing lines to match our shift from an unsaturated to a saturated economy in which the prime task is to fulfill psychological needs. Can we tolerate costs of distribution which frequently run from three to 10 times the cost of production?"

Leonhard called for a separation of marketing research from sales management. "The sales manager is a good drummer who knows how to maximize short-term profits—or in less academic language, he knows how to make a fast buck. If the marketing manager is to work for the company's greatest ultimate benefit, he must be removed from this pressure for immediate sales. And marketing research is one of the many long-range functions which should be vested in the marketing manager."

Leonhard derided the old concept of "nose-counting research," claimed that all research should be motivational in essence.

• **Such a Nice Salesman**—Leonhard en-

tertained his audience with slide films and anecdotes illustrating how depth techniques have revealed the frequent fallacies basing marketing programs on untested observations of consumer motivation.

But one story disturbed his non-marketing listeners. He told of a company selling an identical product for \$40 at retail and for \$220 door-to-door. An obdurate female customer turned down the retail product, yet delightedly bought it for \$220 when it was displayed by a door-to-door salesman. On being queried, she responded, "It's such a wonderful product—and he was such a nice salesman."

An engineer in the audience was disturbed by "the ethics in the situation." Leonhard countered: "The lady got what she really wanted, didn't she?"

Another engineer wanted to know what marketing research could do "when customers started staying away from a product in droves." Leonhard's suggestion "Try a fire sale—and do your marketing research first next time."

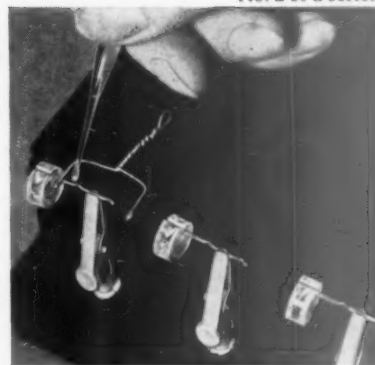
• **Revolt**—These diverting episodes aside, all the speakers hammered at the need to revamp company structures along marketing lines, to redirect company thinking toward customer orientation. After two days, AMA threw the seminar open for a question period.

The engineers and financial men staged an insurrection at this point over what they regarded as empire-building by the marketing department. Cried a comptroller, "Does this make me a rubber stamp?" And a president complained, "I'm figuring on going home, hiring a marketing man, and resigning."

Chmn. Dick conceded some possible overenthusiasm in selling the marketing concept. He explained, "What we are promoting is men who think marketing, not marketing men."

• **Summing Up**—AMA's Marketing Div. manager, Edward Reynolds, however, took this organizational bull boldly by the horns. Summing up, he said: "You have been looking at a lot of organizational charts in which we seem to be trying to enlarge the size of the marketing box. We are trying to do precisely that." Then he softened the blow: "But the occupant of that exalted box can come from any of the functions of the company. The key question is, does he think in marketing terms? The marketing manager is not the sales manager looking ahead to become president."

Despite the temporary revolt, registrants came out of the seminar full of enthusiasm for it. Most of them chimed in with a representative of Blackhawk Mfg. Co., who commented, "I'd describe this course as a think-stimulator. A lot of the statements were somewhat shocking, but then, some of us need to be shocked" **END**



Eastman 910 Adhesive solves another production bottleneck

Universal Transistor Products Corp., Westbury, New York, makes a direct-reading precision radiation monitoring instrument, called a dosimeter.

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Pressure or Catalyst**

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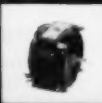


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MOLDED SHOE, by Utrilon, is one of two competing lines as . . .

Plastics Bid for Shoes

THE shoe pictured above looks like any casual summer shoe. But looks are deceiving. This shoe is of plastic, molded in one step. And right now one of the nation's biggest retailers says it can't get enough of them.

The shoe pictured was the first to reach the retail market this spring. This week, a competing shoe, injection molded all but the upper trim, is arriving in force at "some of the biggest department and shoe chain stores in the country." What proponents of the plastic molded shoes call the first major breakthrough in the industry in 25 years may be under way.

• **Newcomers**—First in the field was Utrilon Corp., a concern that originated two years ago in Sydney, Australia, now has plants in England, France, Johannesburg, and, for the U.S. market, Puerto Rico. The second, Intercontinental Shoe Co., headquartered in Chattanooga, Tenn., was formed in January, 1958, with Harry B. Johansen, former St. Louis shoe maker, as chief.

Both manufacturers say their products far outwear leather. The colors, which are varied and gay, can't scuff off. The shoes are flexible, comfortable, yet retain their shape, both makers claim.

• **Price Is Right**—Best of all, from the consumer's point of view, is the price. For both lines, prices range from \$1.98 or thereabouts at retail for children's shoes to about \$4.

From the pricing viewpoint, the timing is propitious. Leather prices soared this spring to double their level a year ago, thanks to a decrease in cattle hide supply and a strong increase in demand.

• **Simplified Production**—A major factor in the lower prices of the molded shoes is the ease of production. The molds themselves require great skill and are costly; they can run around \$3,000

to \$5,000 for a single mold. But once you have the mold—and the appropriate plastic mix—production is a breeze. Utrilon, requiring only one step, turns out a shoe in 15 seconds. Intercontinental takes about seven steps, since its trim (plastic, leather, or cloth) is added separately. Conventional shoes require anywhere from 150 to 200 and more separate operations.

Utrilon is made of a mix of polyvinyl chloride. Intercontinental uses a vinyl developed with Union Carbide Plastics Co.

Both companies concede some problems. Consumers always ask, "Aren't plastic shoes hot?" Unlike leather, plastic is not absorbent. So far, neither company reports any complaints by wearers on this score. Most of the models marketed have been open sandal or moccasin types, with coolness built in. There's a question of how far you can go in molding a high-style pump, for example, though Utrilon officials think this is not an impossibility. But neither company expects to compete with leather for the manufacture of quality shoes.

Significantly, International Shoe Co. (BW—Apr. 26 '59p126), leading U.S. producer, has signed a three-year contract to act as sole U.S. distributor for Utrilon's shoes. So far, it is the only major selling this product. But the other big ones are watching. Brown Shoe Co., International's strongest competitor, says the company is studying them. Genesco, another leading producer, says: "We are experimenting, and we will bring out plastic shoes if and when it is propitious. We have no definite plans."

• **Marketing Start**—Marketing of the shoes got its start two years ago when Leonard Rae, an Australian in the plastic luggage business, saw a molded



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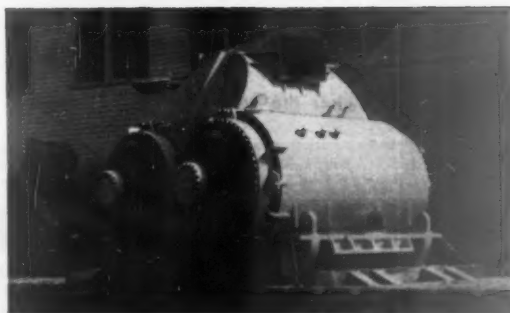
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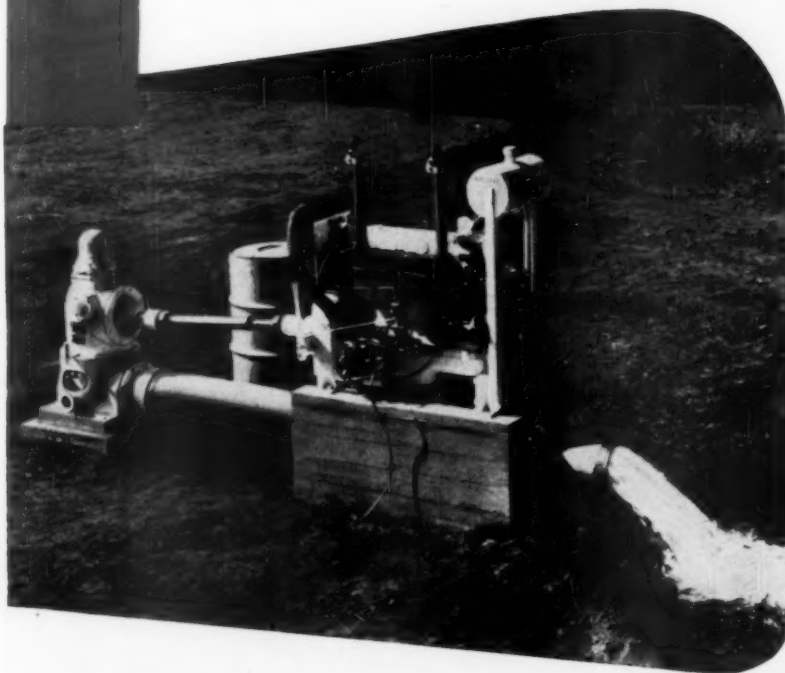
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beach sandal made by a Frenchman, Roland Wucher. Rae figured he could improve on the dies, wound up with his own die-making plant in England. Rae has introduced Utrilon footwear in such unlikely spots as Pakistan, Singapore, Malaya, Greece, Egypt, South Africa, and Thailand. Utrilon believes it is developing a brand new market among the army of people who have never worn anything on their feet before.

Intercontinental's product is the brainchild of Frank Muller, whose family has long produced quality footwear. He spent seven years developing a mold, now holds—or has applied for—patents on it in 14 foreign countries as well as the U.S.

• **Broader Lines**—Children's shoes account for about 40% of its sales so far, says International Shoe. But both companies have, or soon will have, a line of men's, women's, and children's plastic shoes. Utrilon's 1960 line will offer closed toe as well as open-toe styles. Intercontinental will have a sock shoe this fall, with the sock built in. "Toss them in the washing machine, and you'll have a spang clean shoe and sock overnight," says Executive Vice-Pres. Ben Caldwell.

Utrilon's shipments to the U.S. are expected to reach 750,000 pairs this season. A slow start has forced cutbacks in orders.

Intercontinental is now turning out between 1,500 and 2,000 pairs a day, can make up to 4,000 on a one-shift operation when its Winchester (Tenn.) plant is going full blast. Its June and July output is sold out.

One big department store that advertised the Utrilon shoes has no comment on results—possibly because of the supply shortage. Another big retailer says the reaction is "delightful. We can't keep up with demand."

• **Industry Reaction**—Officially, at least, the conventional shoe industry expresses little concern at the development. But at least some elements in the trade are frankly worried that the newcomer may "undermine our whole established business." International Shoe admits that its plastic shoes hurt sales of its conventional summer casuals some. The big St. Louis company signed the Utrilon contract, though, to beat the competition. "If we didn't take them, someone else would," an official says.

Neither Intercontinental nor Utrilon has any expectations of driving leather out of the market. "It will be five years before we make a real dent," says an Intercontinental executive. "But," points out Jesse Lide, Utrilon vice-president, "we wouldn't feel so sure of our product's future if it had flopped in a country or two where we have marketed it. But in every market, the shoes have gone over." **END**



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In Marketing

• • •

"Fair Trade," Competition, Prices Combed Over at Senate Hearings

Retail marketing, competition, and prices are getting a going over in at least three different Senate hearings in Washington:

"Fair Trade": The opening round of Senate hearings on a national "fair trade" law is under way, with critics and sponsors touching all bases in a familiar debate on resale price maintenance. The bill may reach a vote in the House, but no final Senate action is likely this session.

Bread Prices: Sen. Estes Kefauver (D-Tenn.) took his Antitrust & Monopoly subcommittee study of "administered" prices and industry concentration into the bread industry last week. Kefauver, who has already investigated pricing policies of such heavy industries as steel and automobiles, hopes the bread probe will put some political punch into the administered price theory.

Auto Dealer Discounts: Sen. Mike Monroney (D-Okla.), who scored a mild surprise in getting his automobile price labeling bill approved last year, has come up with an idea to give dealers some territorial protection without running afoul of the antitrust laws.

Monroney would amend the Robinson-Patman price discrimination law to allow car manufacturers to give an additional discount to dealers for sales to customers in the territory which the dealer is required to develop. This would help "responsible dealers" meet the competition of cut-rate sellers of the same make of automobile who do not maintain service facilities, Monroney says. He believes this proposal has more chance than other pending proposals to legalize territorial security clauses. Hearings on the bill are scheduled for this week.

• • •

Post to Test Newsstand Price Boost While Reader's Digest Tries a Cut

This week the major consumer magazines continued to tinker with newsstand prices. Bucking a downward trend, the Saturday Evening Post will start test marketing a price increase in three Western states. For the next six months to a year, the Post will watch reader reaction to paying 20¢, rather than 15¢ an issue for newsstand copies in Montana, Wyoming, and Utah. The Post picked these three rather sparsely settled states for two reasons. Post newsstand sales run low in the area—about 25,000 per issue. And there are no big cities bordering the states where bargain-conscious readers might cross over to get the Post at a discount and thereby distort results.

The Post has shunned publicity on the test, will say only that it wants to "see if a price increase is supportable." It will make no additional charge for subscriptions in the test states.

With circulation increasing rapidly, the Post now finds its most pressing problems centered on bolstering ad revenue.

Reader's Digest is taking a better-traveled magazine route in trying out a drop in newsstand prices. Following up restricted experiments with its February and March issues, the Digest will launch a full blown trial in June. The Digest has paired off two sets of 27 of its cities most important in terms of circulation. It will sell on newsstands for 29¢ in 27 cities, for 25¢ in 27 others. In the rest of the country it will continue to sell for the regular 35¢ price. Subscribers won't get any commensurate reduction.

The Digest vehemently denies that it intends to follow Life's course in establishing a permanent decrease in newsstand price (BW—Jun.20'59,p55). It will revert to regular prices in July, then run the test again in the same 54 cities in August. The Digest seems to have selected the summer months as an experiment to see if it can offset a seasonal circulation slump. Its educational issue—about 500,000 copies going to schools—runs only during the nine months of the regular school year. If the decreased newsstand price significantly boosts circulation, the Digest will probably make the "summer discount" a regular feature to smooth out its year-round circulation pattern.

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Oklahoma Upheld in Ban on Price Cuts Below Cost to Fight Trading Stamps

Trading stamp companies, which argue that stamps represent discounts for cash rather than price cuts, won a victory of sorts this week. The U.S. Supreme Court upheld the use of the Oklahoma Unfair Sales Act to bar Safeway Stores from cutting prices on certain grocery products below cost to meet the competition of trading stamps.

The Oklahoma Retail Grocers Assn. sued Safeway when the chain cut prices to match the net of competing grocers' prices, taking into account the value of trading stamps.

Safeway, then in full battle against stamps, argued that giving a trading stamp with goods sold at or near cost resulted in an unlawful reduction below "cost" under the state's Unfair Sales Act, to the extent of the value of the stamps.

The state courts ruled against Safeway and said the chain could not reduce its prices to meet trading stamp competition (BW—Sep.11'54,p176). In appealing to the U. S. Supreme Court, Safeway argued that Oklahoma was making an unconstitutional discrimination between stamps and price-cutting.

The Supreme Court rejected Safeway's arguments. Justice Felix Frankfurter said "the clash of expert opinion" on this point is enough—in itself—to support Oklahoma's decision to treat the two differently.

Significantly, Frankfurter noted "a vital difference" that supports the state's decision. A primary purpose of Oklahoma's law is to end loss-leader selling. Selective price cuts, Frankfurter said, tend to perpetuate loss-leader selling. The use of trading stamps—given "across the board" on all items—does not.



SHOW in New York's Coliseum features British-styled Moskvich.



Volga that seats five, reportedly has 85 mph. top speed, gets 30 mi. per gallon . . .



. . . Chaika, with a V-8 engine, fancy grille and plenty of chrome, and a Detroit look.



BIG WORKS at Gorki, east of Moscow, originally built by Ford Motor Co. in 1929-31, turns out Volgas (above), trucks, and Jeep-like vehicles.



MAIN PRODUCT of Soviet vehicle industry (over 75% of output) is trucks; Western experts say they are well-designed and built for hard use.

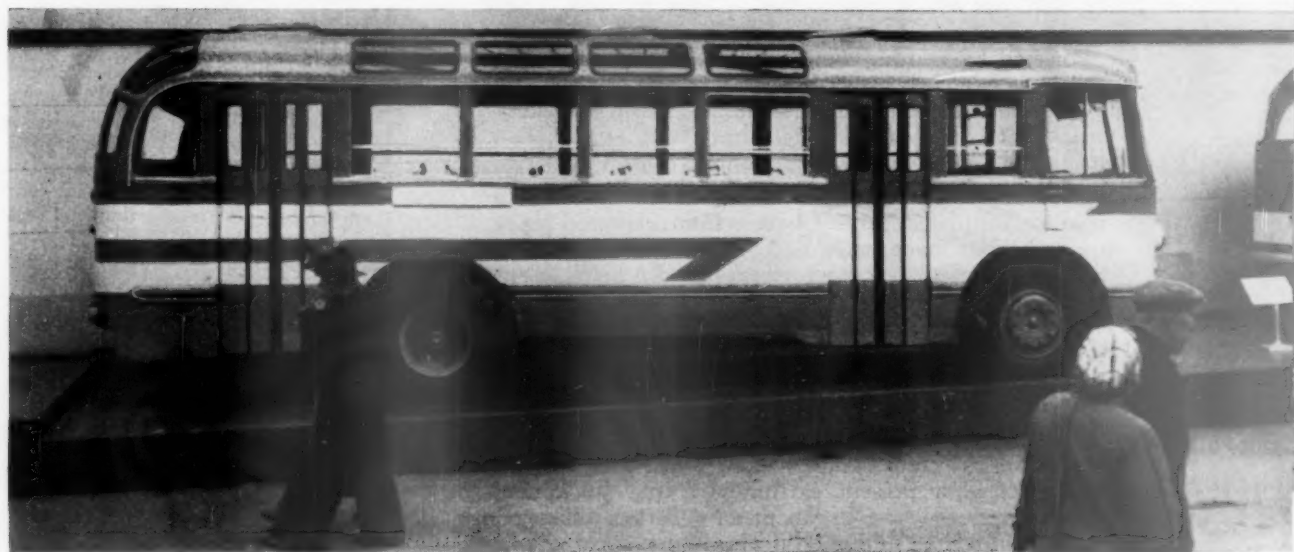
Car-Hungry

When the Soviet government announced that the baby-sized "965" car would go into production next year, a certain Ivan Nikolaievich Tsupko organized a "commission" to line up customers for the much-publicized model. He charged one ruble per "reservation."

The first week, 150 Muscovites fell for Tsupko's scheme. Some customers even offered to prepay the full price. They were eager to help finance construction of the plant for building the



OFFICIALS alone can afford, and get, luxurious Zil—also shown in New York.



MASSES of Soviet citizens must use buses, because of car shortage, high prices.

Russians Yield to Export Push

runabout 965, on condition they would get delivery within two to four years.

By the time Soviet authorities caught up with Tsupko three weeks later, nearly 6,000 "reservations" had been placed.

• **Unsatisfied Hunger**—The average Russian clearly is hungry for a new car—or any car at all. In the years ahead, he may have a slightly better chance than now of getting one. During the present Seven-Year Plan, auto and truck production is slated to rise from 511,000

units last year to as high as 856,000 in 1965.

Yet, on the face of it, Soviet state planners couldn't seem to care less for the average Russian's desire for a car. The anticipated outlay for increased auto production is proportionately far smaller than the money to be invested in chemicals, plastics, machinery, and even run-of-the-mill consumer goods.

• **Exports First**—In Moscow's scale of priorities, only one aspect of the auto

industry—exports—rates high. That's evident from its display of passenger car models (pictures) at the \$10-million Soviet exhibition opening next week in New York City's Coliseum. There, Americans will get a close look at the bantam-sized Moskvich, the larger Volga, the "luxurious" Chaika, and the limousine-type Zil 111.

As far as the U. S. goes, these models are mostly for show. In fact, it's unlikely that Russia will try to sell more

This Big "Twin"



... one of EUCLID'S BIG 3

Powered by two big diesel engines, the Euclid TS-24 Scraper is in a class by itself when it comes to return on investment. All wheel drive and 24 cu. yd. capacity struck—32 yds. heaped—give the "Twin" unequalled work-ability that cuts costs and improves profits.

Each engine powers one of the drive axles through a separate Torqmatic Drive. Changes from one speed range to another are made under full power. Independent hydraulic control of all scraper operations also helps to cut cycle time and increase productive capacity. With its big power and big performance the Euclid "Twin" can work under conditions that stop other scrapers. Contractors, mines and industrial users of big earthmoving equipment all over the world are depending on "Twins" to help beat the pinch on profits.

Compare the performance of the "Twin" with the production of your present earthmoving and stockpiling equipment... see how it can mean a better return on your investment. The Euclid dealer in your area will be glad to provide helpful facts and figures.



EUCLID

DIVISION OF GENERAL MOTORS
Cleveland 17, Ohio

Two other teammates of the "Twin" Scraper—the 21 yd. Model S-18 Scraper and TC-12 Twin-Power Crawler—are providing years-ahead performance on a wide range of work. Euclid's Big 3 can play a big part in improving your profit picture... get the facts.



than a token number of cars in the U. S. market, where more than 75 foreign makes already are competing.

But elsewhere, in the West as well as behind the Iron Curtain, Russia is actively pushing both auto and truck sales. Oddly enough, if you can believe reports from Moscow, most Soviet citizens take pride in these exports. In fact, the Soviet press frequently and openly discusses vehicle exports.

I. Headway Abroad

The Soviet press recently gave wide publicity to the Anglo-Soviet trade agreement (BW—May 30 '59, p79). Under this five-year trade pact, Soviet autos will be sold for the first time in Britain.

Moscow already claims that some 200,000 cars and trucks have been sold to 42 foreign countries. Soviet statistics, of course, are somewhat deceptive. They lump autos and trucks together. They also include cars driven by Soviet and other Communist diplomats stationed around the world.

Still, though the Communist bloc absorbs the great bulk of vehicle exports, the Russians have been making headway in other countries over the past few years. They have sold around 30,000 cars to Finland—generally at prices slightly above those of competitive British and German cars. They also have sold to Norway, Iceland, Egypt, Afghanistan, Iran, and Burma.

• **Export Patterns**—Yearly export volume isn't large. But it's a substantial proportion of Russia's total auto-truck output. Take 1957—the latest year for which figures are available. Russia exported 23,000 cars or about 20% of total passenger car output.

Beyond that, the pattern of Soviet vehicle exports has been shifting. In 1955, Russia shipped out 12,920 cars and 22,413 trucks. By 1957, it was selling 23,000 cars abroad, but only 11,200 trucks.

Meanwhile, with Soviet domestic demand increasing and vehicle output edging upward slowly, Western observers wonder why Moscow is emphasizing exports so much. (Between 1955 and 1957, total vehicle output climbed from 445,300 to only 495,000, with trucks taking 77% of production yearly.) Diplomats in Moscow give a simple answer: prestige.

II. Soviet Market

For the same reason—prestige—the Russians keep bringing out new car models. At least, that's the explanation given by Nevin L. Bean, transmission engineer at Ford Motor Co., and possibly the only man from the Detroit auto industry to have visited a Soviet auto plant in recent years.

He says the Russians have no incen-

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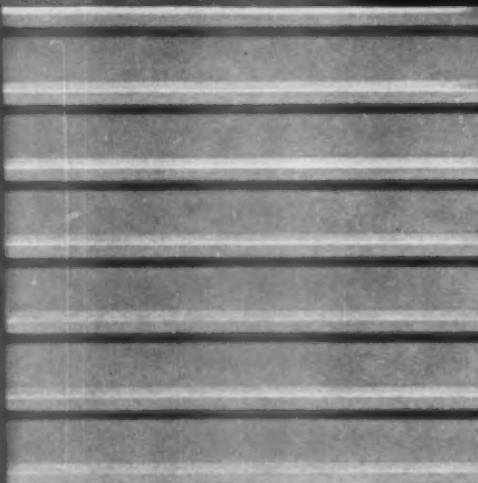
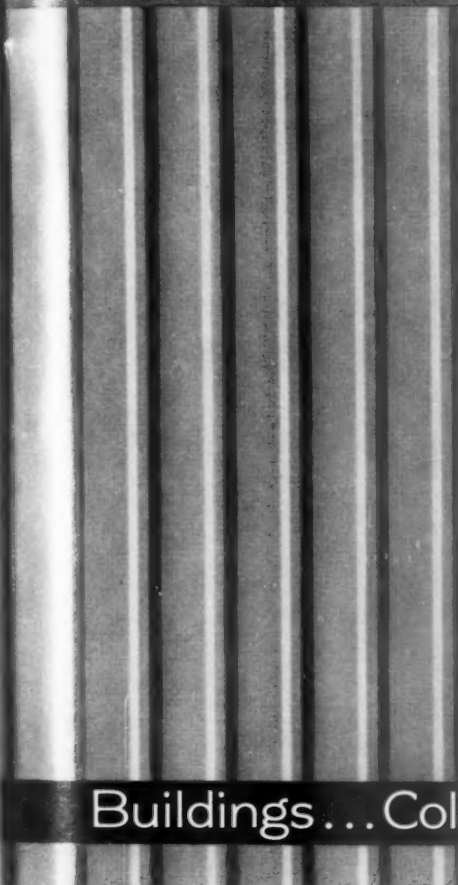
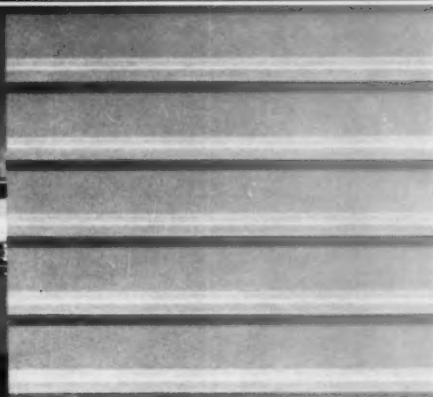
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Buildings...Color...and

NATIONAL STEEL

It can come today or tomorrow—that time when you need a new building for your store, manufacturing plant, warehouse or farm.

You want your building to be low cost yet handsome. Quickly erected yet solidly built. Efficient. Easily maintained. Long lived. For all of these, select a fine building from the broad line that has established National Steel, through its Stran-Steel division, as a leader in the development of steel buildings.

And now, color . . . a National Steel first! Today, through its Stran-Steel division, National Steel is offering a major new building development—beautiful factory-applied color coating in

lustrous Stran-Satin blue, rose, green, bronze, white, gray or any combination. Yes, lasting beauty and extra weather protection at a cost usually less than 1 per cent of building cost. (For literature, write Stran-Steel Corporation, Detroit 29, Michigan.)

Pre-engineered buildings in factory-applied colors are typical of the many continuing advances that National Steel brings to American industry through its six major divisions: Great Lakes Steel Corporation, Weirton Steel Company, Enamelstrip Corporation, The Hanna Furnace Corporation, National Steel Products Company and, of course, Stran-Steel Corporation.

NATIONAL STEEL CORPORATION, GRANT BUILDING, PITTSBURGH, PA.





TEXAS EASTERN

Transmission  *Corporation*

HOUSTON, TEXAS - SHREVEPORT, LOUISIANA

This, Too, Is Texas Eastern

Big things are happening on the Little Big Inch

Born of necessity in 1944 to supply petroleum products needed for the war effort—the Little Big Inch has had a busy career.

Purchased by Texas Eastern in 1947, along with the Big Inch, the Little Big Inch for ten years transported natural gas from fields in the Southwest to Midwestern and Eastern Seaboard states. Late in 1958, it was put back in service as a transporter of clean petroleum products.

Consisting of 1200 miles of war-built lines and some 600 miles of new feeder and delivery lines, the Little Big Inch is today one of the nation's largest and most important petroleum transportation facilities. Strategically located along the 1800-mile system are more than 12 million barrels of surface storage, in addition to rapidly expanding underground storage.

The Little Big Inch links the refineries of the Gulf Coast and Mid-Continent areas, where oil is refined in abundance, to the Ohio Valley and Great Lakes regions—where little petroleum is produced and demand for products is great.

In addition to gasolines, jet, diesel and furnace fuels, the Little Big Inch now carries liquefied petroleum gases (propanes and butanes) so rural and suburban families can enjoy the comfort, convenience and economy of gas heat and refrigeration.

Little Big Inch Division furnishes striking proof of Texas Eastern's aim to become, by diversified GROWTH, an even more valuable worker in the service of the nation and America's petroleum industry.



OIL AND GAS: Exploring and Producing
NATURAL GAS: Processing and Transporting
OIL PRODUCTS: Refining and Transporting

tive to produce radically new designs, and copy U.S. and West European makes. But he says national pride forces the Russians to introduce some new models—even though these may be a hodgepodge of features stolen from Western cars.

• **New Baby**—Typical of this is the 965. It will be—in Moscow's official words—a "baby car" and a partial answer to the chronic problem of too few cars for Russia's growing population.

Though designed at the Moskvich factory, in Moscow, the 965 is mostly a copy of West European models. The four-seater, four-cylinder car has a body like the Fiat 600 and rear-mounted engine similar to the Volkswagen. It will be produced at a remodeled farm-machinery plant at Zaporozhye in the Ukraine. But Soviet authorities say it won't be mass-produced until 1965.

• **Hard Road for Auto Buffs**—Meanwhile, few Russians today get a crack at owning a car. By all indications they would like to buy one. From interviewing in and around Moscow, you quickly learn that though they may never have driven or even been inside a car, Russians can be real auto buffs. Park a Western or new-model Soviet car on a street in Moscow, and soon a dozen or so Russians crowd around it, taking in every detail of design.

To get a car, a Russian must have patience—and lots of luck. First, there's a long waiting list. Then, the man who proves he needs a car for his work has first chance—but he must also get papers certifying that neither he nor a relative living with him owns a car.

If he had bought a Volga or Pobeda (four-door sedan, no longer in production, which the Volga is replacing) within the past eight years, he is ineligible for a new one. Similarly, a man who has bought a Moskvich within the last five years can't get a new one, unless he first sells the old one. State stores do sell used cars; but there, too, you find long waiting lists.

• **Out-of-Reach Prices**—If a Russian does get approval for a new car, he pays 40,000 rubles (\$4,000 at the unofficial 10 rubles per \$1) for a Volga; 25,000 rubles (\$2,500) for a Moskvich. But the official Literary Gazette recently reported that Volgas bring 70,000 rubles on the black market; Moskviches, 40,000 to 50,000. (Export prices, of course, depend on foreign market conditions and how much Russia would like to sell in particular markets.)

In any case, limousines such as the Zil 111 are completely out of the reach of all Russians except for top officials.

True, Moscow and a few other big cities are starting up car-rental services. The one in Moscow already boasts 91 cars. But the cars have over 100,000 mi. on them before being put into drive-it-yourself service.

Admitting they lag far behind the U.S. in auto output, Soviet officials say it would be "patently irrational" to try to catch up—even within 15 years. "It is necessary to remember," said an influential Soviet journal recently, "that private cars, for all their advantages, are much less effective than public transport and require large capital outlays."

III. What Kind of Industry?

What really holds back the Soviet auto industry is the fact that it is handicapped by antiquated equipment. Some machine tools are excellent, as Nevin Bean noted after his visit in December, 1955. And the Russians have indicated keen interest in highly automated equipment—particularly in talks with the British. But they just aren't giving priority to autos in modernizing plant.

The industry has plants in some 12 locations, from Riga on the Baltic Sea to Miass in the southern Urals. The largest output comes from Gorki, where Ford Motor Co. built a plant for the Russians in 1929-31, and from Moscow.

• **Show Place**—The most integrated operation is at Moscow's Likachov Works (formerly Stalin Works). Its 44,000 workers turn out Zil limousines, trucks, buses, and bicycles. The plant's 60-odd shops produce almost all components. But more than half the equipment at Likachov is between 10 and 20 years old—and over one-fifth is older than that.

Under the present Seven-Year Plan, Likachov is supposed to go through a drastic overhaul to make it a "model enterprise." Instead of nine automatic shop lines, there will be 140. New materials-handling equipment will be installed. Today, less than 6% of lifting, hauling, and stacking is done by machines.

By 1965—say Soviet officials—Likachov will be producing 175,000 vehicles, or 70% above the present level. It's hoped that worker productivity will go up some 35% to 50%. And over-all, as Moscow is trying to do in all auto-truck plants, Likachov will become more dependent on outside suppliers.

• **Press Fire**—Despite these plans, the methods of the auto industry are coming under fire from the press. Magazines and newspapers criticize it for inadequately testing new models, cutting costs to the bone, introducing new manufacturing techniques too slowly, and emphasizing output rather than quality.

"How do the cars run?" asks one magazine. "Do they run a long time without repairs?" The magazine concludes: "It seems apparent that somewhat greater unit costs would pay dividends to the national economy. Every kopek spent would bring a ruble in return, for the car would be better made and more economical to run." **END**

ON WALL STREET OR MAIN STREET...

Ford is America's No. 1 dividend car!

It's wise to investigate before you invest in anything so important as a fleet purchase. That's why so many fleet buyers prefer Fords. They know they get the extra dividends of built-for-people comfort . . . new aluminized mufflers that last *twice* as long as ordinary mufflers . . . 4000-mile oil changes . . . an amazing new finish that requires no waxing . . . famous standard Ford V-8 or Six power that *thrives* on regular gas . . . lowest first cost of the most popular three!

To top it off, business fleet buyers know that when they buy 59 Fords they are buying the car that most people are sold on (including their salesmen). Fords are *first* in sales all over America because Fords are worth more. And that means you can figure on a higher return on your investment when you sell!

59 FORD FLEETS

FORD DIVISION, *Ford Motor Company*



In Business Abroad

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British Challenge Volkswagen, Renault With "a Radically New Baby Car"

Faced with highly successful competition from the Renault Dauphine and the Volkswagen, British Motor Corp. (Austin, Morris Minor, MG) is gearing up for production of a "radically new baby car."

BMC has poured \$30-million into development of the small four-seater, according to Chmn. Sir Leonard Lord. BMC says the car will be "introduced" in August.

With an 850-cc. engine, the new car would have an engine output close to the Morris Minor 1,000. BMC says production of the Morris and the Austin A-40 will continue (though production of the Austin A-35 may not). The company is hush-hush about exact design and sales targets for the new car. But it's supposed to feature a combination of front engine and front drive, plus a novel suspension system either fluid or made of rubber.

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Paris Bourse to List German Stocks In Move Toward Common Capital Market

The European Economic Community (Common Market) is about to move a step closer to one of its main goals—creation of a common capital market linking the European stock exchanges (BW—Jun. 6 '59, p104).

Starting in July, shares of five large West German companies will be traded on the Paris Bourse. Included are the two biggest electrical equipment makers (Siemens and AEG), two IG Farben successor companies (Farbwerke Hoechst and BASF), and a steel firm (Rheinische Stahlwerke).

Farben-Fabriken (another IG successor) is the only German company whose shares now are handled on the Paris stock exchange. Since they have been listed, there's been an appreciable rise in their quotations.

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Coffee Surpluses Are Heavy Drag On Latin American Economies

Overproduction of coffee is still an acute problem for Latin America's 12 major coffee-producing countries, says the Pan-American Coffee Bureau in its annual report.

Mostly because of heavy surpluses, the U.S. retail price of coffee sank during 1958 to the lowest level since 1950. That accounts for the continuing decline in the income that Latin countries have been getting from coffee exports. Between 1956 and 1958, these "one-crop economies" together saw a drop from nearly \$2-billion to around \$1.5-billion in coffee earnings.

Colombia, for one, relies on coffee for 85% of foreign-exchange earnings. Brazil depends on coffee for 55%. Brazil, in fact, has been turning increasingly to the Com-

munist bloc to try to unload surplus coffee, in exchange for chemicals and machinery.

The outlook for the immediate future, says the Coffee Bureau, is gloomy. At the end of this crop year, the carry-over in coffee stocks is expected to be around 37-million bags. That's roughly "equal to the aggregate demand of the coffee-importing countries for one year." By the end of the 1959-60 crop year, if present trends continue, carry-over stocks may reach 54.5-million bags.

The Coffee Bureau notes that last year's coffee agreement among Latin producers has helped create an "orderly market." It hopes another agreement will be signed later this year, with African producers included.

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Mexico City Seeks Outside Loans To Shore Up Sagging Metropolis

In Brazil, the new city of Brasilia, hewed out of the jungle plateau 600 miles inland, will replace Rio de Janeiro as the capital next year. In Pakistan, the federal government with efficient military brass now at the top plans to move the capital from hot, water-short Karachi to a more northerly location.

Mexico's aim, by contrast, is to try to keep the capital, Mexico City, where it is—on dry land. For this city where 4.5-million people live is literally sinking a foot a year.

Mexico City rests largely on land filled in after the Spaniards conquered the original Aztec-built city of pyramids and canals. Even today, with a local water shortage, Mexicans pump some 150-million gal. daily from the city's spongy soil through artesian wells.

Now the city government is looking for \$45-million from the Export-Import Bank, World Bank, and private banks for what might be called a "sinking fund." Engineers want to start a crash program to sink new wells some 50 miles outside the city to supply water and stop the in-city pumping.

"If we continue this pumping inside the city," says Raul Ochoa, head of the water department, "the center of town will soon look like the bottom of a bucket."

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Business Abroad Briefs

British merger approved this week will link Harrods, London's leading department store, with Debenhams, Britain's most powerful merchandising group. Harrods' book value is around \$65-million; Debenhams, \$157-million. Harrods' approval of deal blocked rival takeover bid from the Glasgow-based House of Fraser.

West Germany's Krupp and Siemens have won an \$8-million Soviet order for 20 electric locomotives, slated for use in Siberia. Siemens is supplying all electrical equipment.

Cars for India: Communist Czechoslovakia's Skoda has placed a proposal before the Indian government for manufacture of a "people's car" priced between \$1,260 to \$1,470. Meanwhile, Tatas, which already is making trucks at its Jamshedpur works with the help of Mercedes-Benz, is negotiating with West European automakers to produce a small \$2,000 car.



"Hold up that crew!"

It means a lot to any shipper to know when his shipment will arrive. Especially in the perishable fruit and vegetable business it can be the difference between profit and loss. Take, for instance, a car load of early vegetables from the south, consigned to a northern city not long ago.

The consignee knew his car was due and had arranged for a crew to be on hand for prompt unloading. But late in the afternoon before the expected early morning arrival the car had to be set out due to bad order.

This information was immediately reported by CLIC—C & O's all-teletype car reporting service—to the C & O traffic office at destination.

The consignee's office was closed but the manager was reached at home and informed of the delay.

Later, he was given re-forwarding information and rescheduled arrival time as automatically reported by CLIC.

Here's what the consignee's manager had to say:

"In view of the advance information given about this car, I should like to commend a fine organization which is able to supply up-to-the-minute information so necessary to successful operation in the perishable fruit and vegetable business.

"Incidentally, that phone call from your perishable agent's office saved our firm a considerable sum of money in man hours and time and one half thus avoided."

Aren't there times when it would mean a lot to you to know where your shipment is at the moment? If it is anywhere on the C & O, CLIC can tell you.



Would you like a copy of a booklet describing CLIC? Just write:

Chesapeake and Ohio Railway

3800 TERMINAL TOWER, CLEVELAND 1, OHIO

S H I P C & O . . . A N D W A T C H I T G O I

In Washington

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Supreme Court Orders FPC to Dig Deeper Into Prices in Catco Gas Contracts

The U.S. Supreme Court has ordered the Federal Power Commission to hold more hearings on prices before it approves the sale of a huge amount of natural gas by four producers from new offshore leases in the Gulf of Mexico.

The so-called Catco group—Atlantic Refining Co., Cities Service Co., Continental Oil Co., and Tidewater Oil Co.—had twice refused to accept cuts in the initial contract price of 22.4¢ per MCF (1,000 cu. ft.). Finally, FPC O.K.'d contracts to sell 1.67-trillion cu. ft. of gas to Tennessee Gas Transmission Co. with no limitation on price.

The New York Public Service Commission and several public utility customers attacked the FPC action in a federal court, which ruled that the commission has no authority to approve contracts in which producers refuse to accept price limitation.

The Supreme Court, in agreeing that FPC must go deeper into the price question, still refused to go along with lower court on FPC's authority, but it hinted clearly that FPC can limit producers' initial rates on new contracts where the public interest requires it.

In ordering further study of the Catco contracts, the high court said FPC should make more careful consideration of such factors as comparative production costs in nearby offshore oil fields, the relation of the producers' price to rate increases to TGT's customers, and the need for additional supplies of natural gas in the 13-state area served by TGT.

Other Decisions This Week

The Supreme Court's big decision day this week is part of its drive to wind up its current term next week. Among other cases (page 91), the court took these actions:

Mirror price fixing—Upheld the conviction of Pittsburgh Plate Glass Co., Galax Mirror Co., Mount Airy Mirror Co., and an official of the last two companies for engaging in an illegal price-fixing conspiracy on flat glass mirrors. These companies, among seven convicted and fined a total of \$27,000 in 1957, argued they had been denied the right to examine the grand jury testimony of a key government witness at the trial. The Supreme Court, splitting 5-4, ruled the companies had not proved any specific need for the grand jury testimony that would justify relaxing the rule on secrecy of grand jury proceedings.

Niagara power project—Agreed to review next year lower court rulings that hamper the New York Power Authority's plans to build the \$700-million Niagara power project. A planned reservoir would flood part of the Tuscarora Indian reservation. Lower courts ruled that Congress did not approve taking the Indian lands (in

alleged violation of an old treaty) when it authorized the Niagara project.

Tax suits—In a rare action, the court granted a rehearing on a suit it had decided against a taxpayer by a 7-1 vote only last June. In that case, the court wiped out hopes that taxpayers might combine the advantages of two ways of fighting tax assessments: either pay nothing and challenge the government's claim in the tough U.S. Tax Court in Washington, or pay the whole deficiency claimed by the government and then sue for a refund in the more lenient district courts.

In the test case, the court last year said a taxpayer could not challenge a tax assessment in the district courts until he had paid the assessment in full.

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GSA Ready to Sell Coconut Oil No Longer Needed in the Stockpile

The government's housekeeping arm, the General Services Administration, tossed another log on the political fire this week when it announced its intention to sell 265-million lb. of coconut oil from the strategic stockpile (BW—May 23 '59, p104). A debate over stockpile policy has simmered along for months in Congress—ever since mining-state senators blocked a move to unload surplus copper.

The coconut oil disposal was O.K.'d by the Office of Civil & Defense Mobilization on grounds that the material—once stored for production of plastics and explosives—is now "obsolescent." **The move points up one way the government can free stockpile surpluses for sale without Congressional approval—by declaring them out of date and no longer needed.**

Meanwhile, the Administration has decided to shelve a proposed bill to give it greater disposal authority, holding this bill in reserve as an answer to the one already introduced by the Senate mining bloc that would put tighter locks on the materials on hand.

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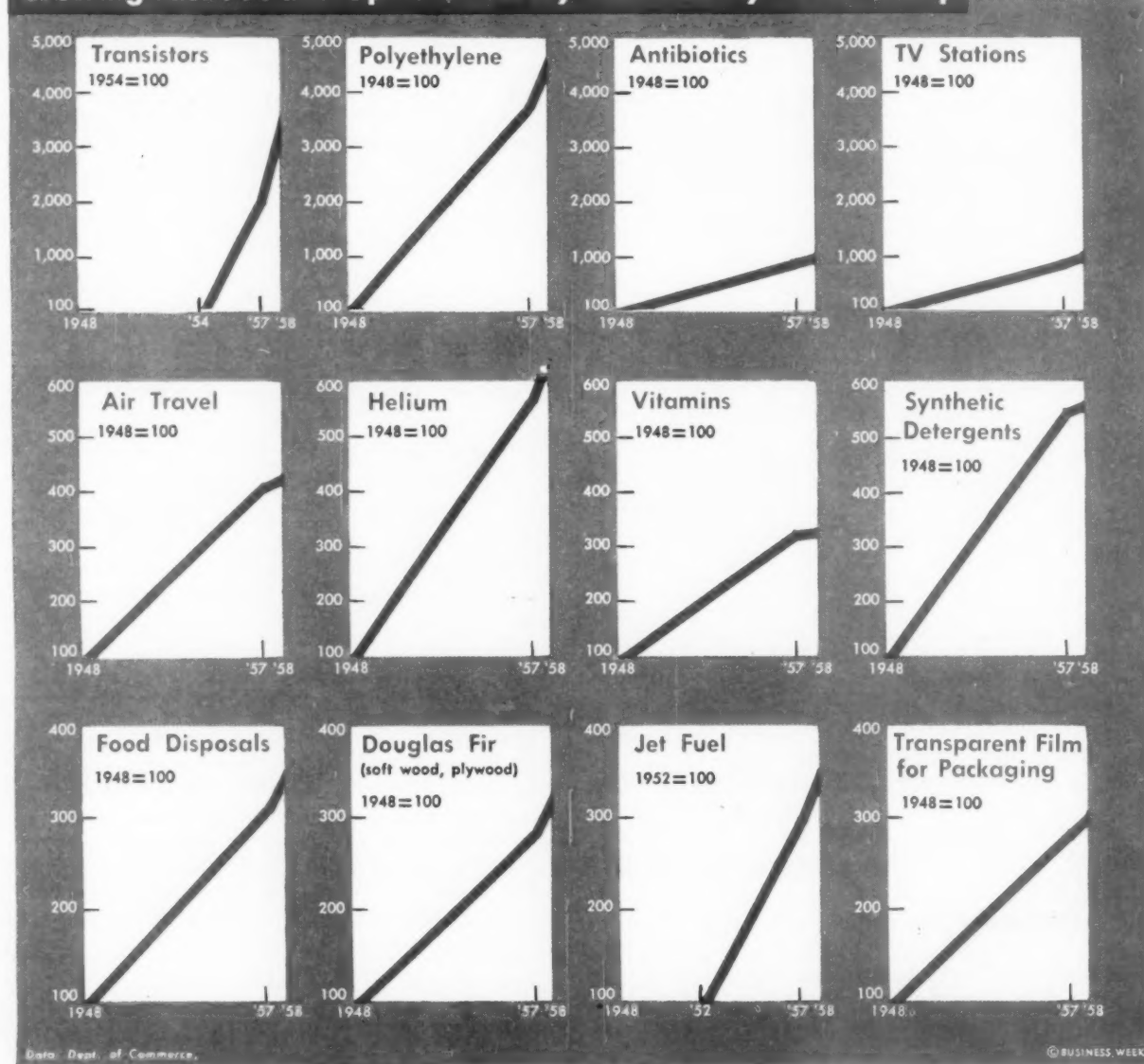
Sen. Bush Files Bill to Limit States' Power to Tax Businesses

A bill to limit the power of states to tax corporations in interstate commerce has been introduced by Sen. Prescott Bush (D-Conn.). Bush told the Senate that a decision of the Supreme Court last February "has thrown the commercial world into confusion," raises the possibility of multiple taxation of profits, and may throw a crushing burden of record-keeping on small business.

He referred to a ruling that affirmed the power of states to tax income even if a company's only activity within a state is to solicit orders. **There is a possibility that businesses would wind up paying income taxes in every state where they sell goods, Bush said.** His bill would limit the tax power to cases where a company maintains an office, warehouse, or other place of business within the state.

CHARTS OF THE WEEK

Growing Fast . . . and Uptrend Hardly Affected by 1958 Slump



Postwar Growth in Products, Services

The charts above and on page 104 depict some of the production patterns of selected products and services that contributed to the nation's postwar economic growth. The Commerce Dept.'s May issue of Survey of Current Business lists more than 300 of such products and services.

Any list of commodities with impressive growth rates will include a number of glamor products that had little or no production prior to World War II. Transistors, for example, are

of recent vintage. Since their introduction in 1954—when production was 1.3-million units—applications have developed so rapidly that by 1958 output hit 47.1-million units.

The persistent uptrend in passenger air travel during 1958 is particularly noteworthy in view of prolonged work stoppages in major air lines at yearend when traffic is usually at a high rate.

Some of the most impressive growth products have come out of the chemical industry—such as polyethylene, anti-

biotics, and vitamins. Polyethylene is one of the fastest growing products developed in the past two decades. Its uses are almost unlimited, ranging from food packaging and housewares to piping and wall partitions. Output started off with 1-million lb. in 1943, expanded to 50-million lb. by 1950, and nearly 900-million last year. Antibiotics have an equally impressive record. Since penicillin was introduced in 1942, many other "miracle drugs" such as Aureomycin, Terramycin, and Streptomycin



New face in town—bright aluminum

The shining new look of "bright dip" aluminum is being seen more and more on today's automobiles. Radiator grilles, body trim, dashboards and door strips are formed from rust-proof-forever aluminum and then "bright dipped" (chemically polished) and anodized to a brilliant lifetime finish. Most important to auto makers—"bright dipping" has made it practical to use easier-formed aluminum in place of steel for trim.

Of course, this new super polishing method is not confined to the auto industry. It is being used on an increasingly wider variety of aluminum products—from trash cans to jewelry...from building materials to zippers. The important chemical in chemical polishing is phosphoric acid. In a "bright dip" solution, phosphoric acid polishes aluminum—and copper, brass and stainless steel—more

perfectly and efficiently than is possible with other methods. It does the job by dissolving the high points of the metal's surface faster than its valleys. This, in effect, smoothes or polishes the metal—in minutes!

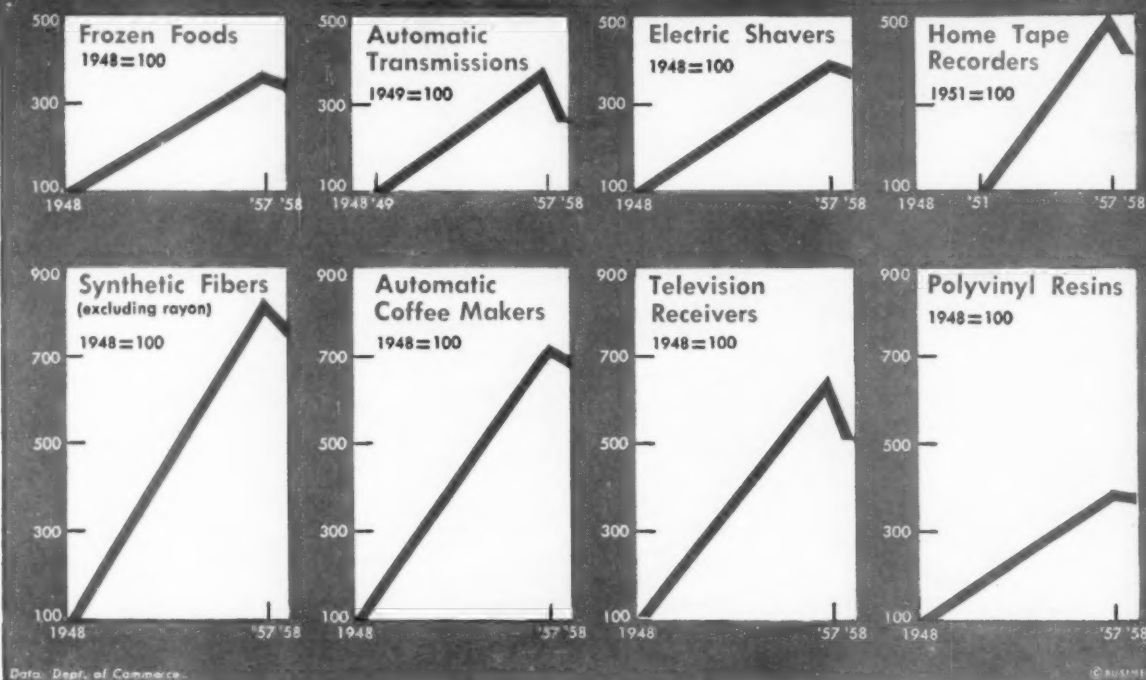
V-C phosphoric acid, like all V-C phosphate chemicals, reaches customers at peak quality and purity. That's because of V-C's integrated operational control—from mining its own phosphate rock...on through production to non-contaminated delivery in its own V-C trucks. For full information on V-C phosphate chemicals in terms of your product or service, see your V-C distributor, or write direct to:

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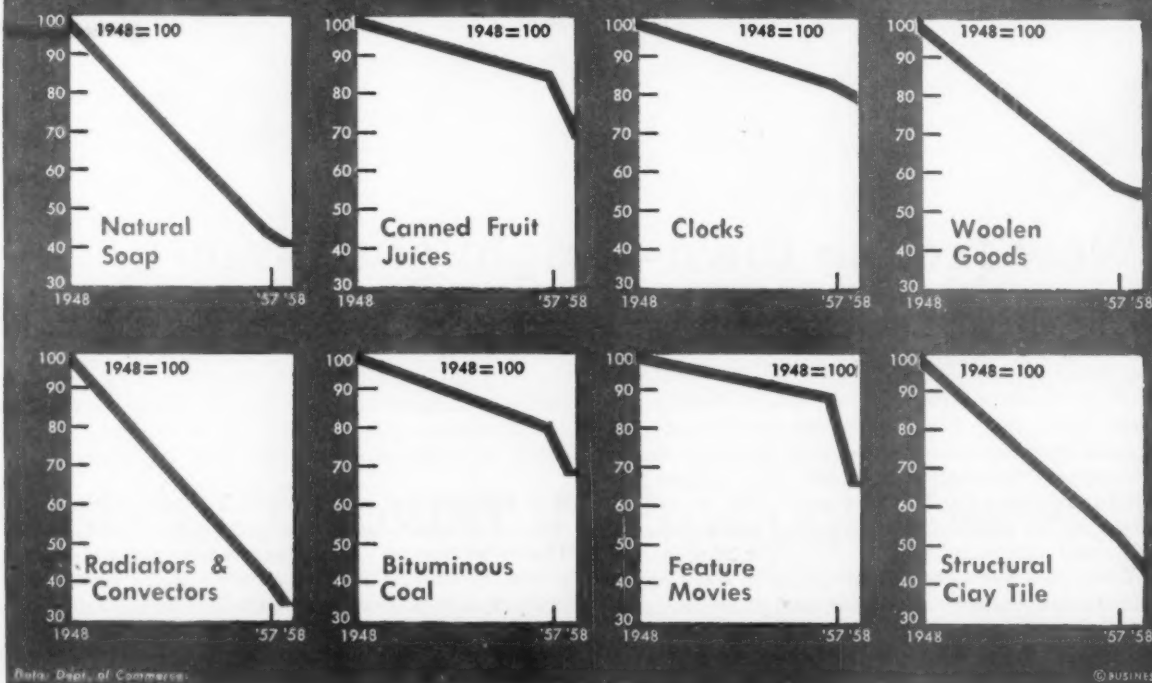
FOR PROFITS AND PROGRESS...SEE



Rapid Postwar Growth Checked by Recession



Declining Steadily



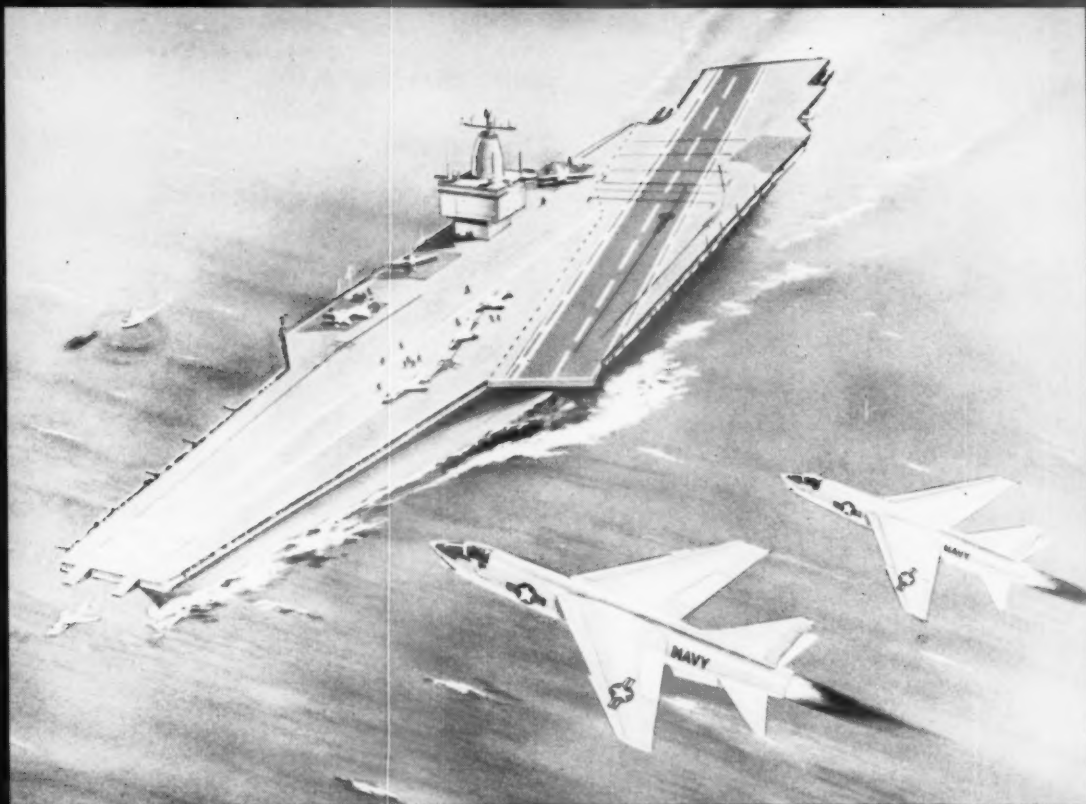
are now common household words. One result is a decline in the use of sulfa drugs as the newer antibiotics take over.

The second group (above, top) is comprised of products whose striking postwar production rates were inter-

rupted by the 1958 recession. Many are consumer-oriented items. Frozen food production declined last year as a result of bad weather conditions that reduced crops suitable for freezing.

The output of products in the last

group of charts declined for varied reasons: substitution of more efficient, better quality, or cheaper items; changing tastes; and displacement by synthetic materials, as in the case of natural soap and woolsens.



WORLD'S FIRST NUCLEAR AIRCRAFT CARRIER WILL USE "BUFFALO" FANS AND PUMPS

Official U. S. Navy Photo

A new "Big E" will soon add its potential striking power to our national defense program in the jet age. The U. S. Navy's huge USS Enterprise will be the first nuclear-powered aircraft carrier to join the fleet. The successor to the "Big E" of World War II fame, it will be the eighth Navy ship to bear this name. The newest Enterprise is now under construction at the Newport News Shipyard.

Playing their part in the efficient overall performance of the Enterprise will be over 365 "Buffalo" Fans and over 75

"Buffalo" Pumps. These units will be relied upon to give the usual quiet, efficient, trouble-free service expected of all "Buffalo" products. Applications of "Buffalo" Centrifugal and Axial Flow Fans will include space and gland exhaust. Liquid-handling jobs of "Buffalo" Centrifugal Pumps will range from reactor fresh water cooling to steam drain tank collecting service.

You, too, can rely on "Buffalo" Fans and Pumps for maximum efficiency with a minimum of maintenance.

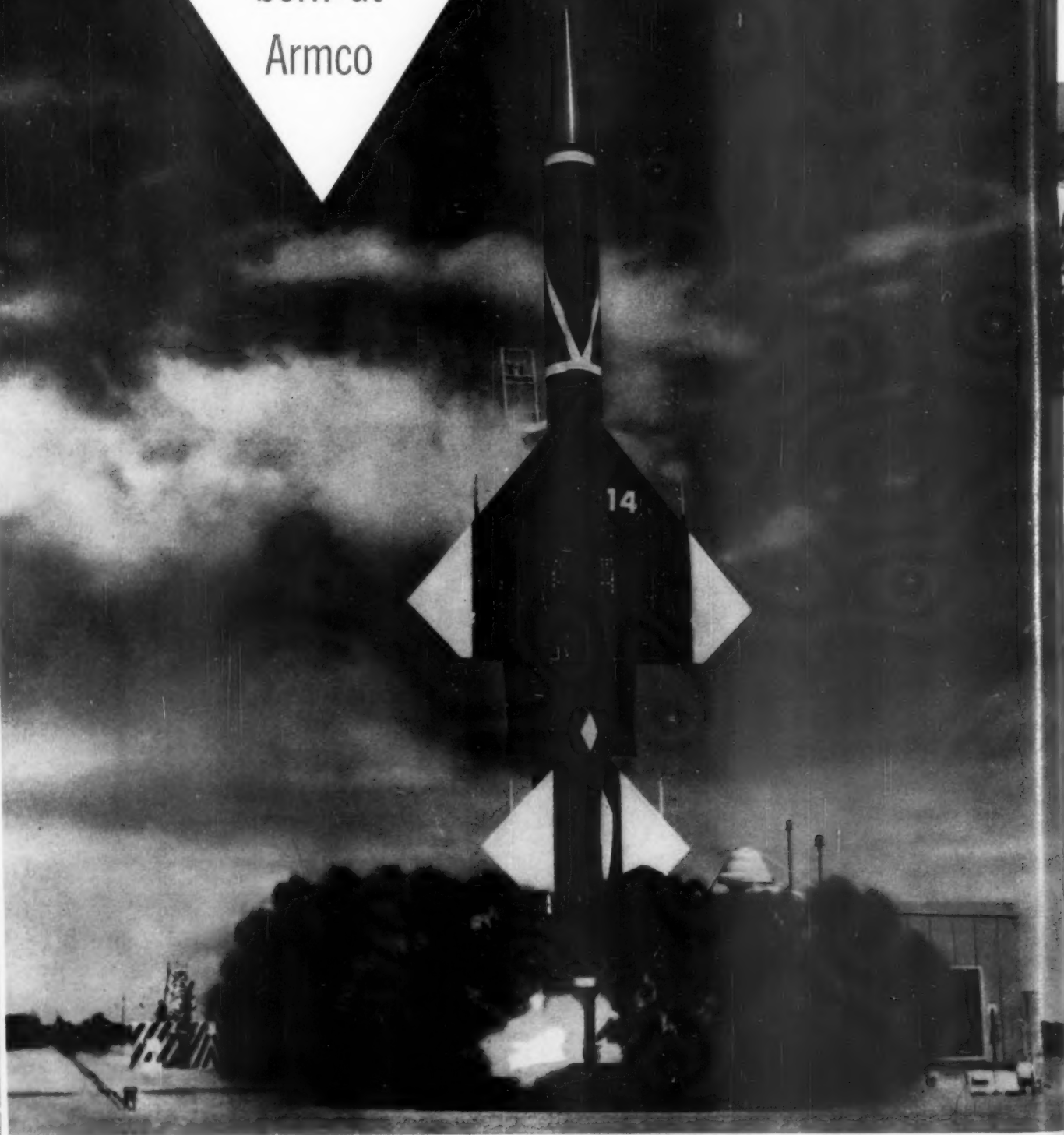


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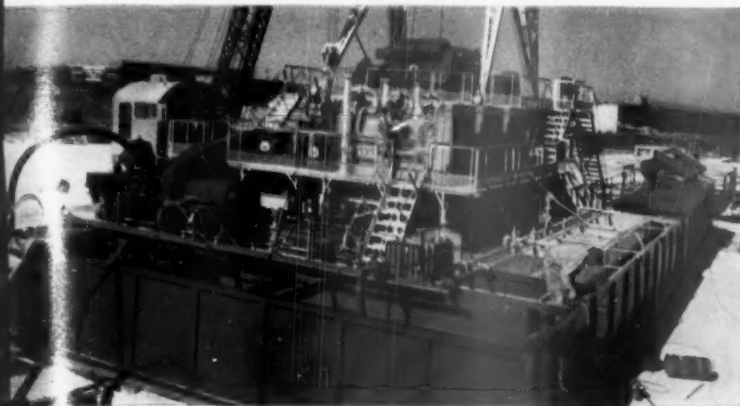
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weight ratios at temperatures up to 1000 F. They are widely used in missiles, fighters and other aircraft. Armco Division also produces special coated grades and other sheet steels used by thousands of manufacturers.

"RIG-UP" FOR A DRY RUN WITH A PAYOFF

On many drilling rigs for overseas, Armco's subsidiary, **The National Supply Company**, makes a pre-shipment "rig-up." Everything shown is assembled, lubricated, broken in, tested, dismantled and paint-coded for reassembly. This helps avoid costly delays in remote desert and jungle areas. Such service, backed by finest products, has helped make National the world's largest manufacturer and distributor of oil-field equipment.



UNDERPASS SAVES TAXPAYERS' DOLLARS

This Armco **MULTI-PLATE®** Pipe will carry traffic under a 4-lane thruway. It saves costly construction of a conventional underpass. Many Armco Corrugated Metal Structures are still in good condition after 50 years of service. **MULTI-PLATE** Pipe is one of more than 30 products made by **Armco Drainage & Metal Products, Inc.**



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In winter, a ski lift — in summer a scenic lift. The lives of people who ride it depend on wire rope that carries their ski chairs. From **Union Wire Rope Corporation**, an Armco subsidiary, come more than 1600 kinds of special wire and wire rope. They do thousands of jobs, from stopping a jet landing on a carrier deck to lifting a railroad locomotive.



THESE GLOWING STEEL BALLS WILL GRIND URANIUM ORE

Here you see them coming from a forging machine at Armco's **Sheffield Division**. When heat-treated and quenched, they'll be extremely hard and abrasion-resistant. Sheffield grinding balls are shipped to mines, mills and cement plants around the globe. This is another way Sheffield Division's many specialty steel products serve business and industry.

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ARMCO STEEL

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he heard it in his mind

He could not hear the music whose beauty was to echo down the ages. He was deaf.

But Beethoven "heard" his melodies in his mind.

Man frequently is the prisoner of his body.

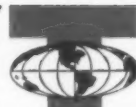
But great music, art, science—all human advancement in fact—does not depend on the physical being.

Its birthplace is the mind.

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petrochemicals that mean ever wider service to man.*

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At Last, an Insurance Tax Bill

● The first permanent legislation covering life insurance company taxes since 1942 has cleared Congress.

● It raises the Treasury's take by increasing the tax on income from investments and imposing a levy on income from underwriting.

● Stock companies will suffer because underwriting income is relatively more important to them.

Congress and the Treasury Dept. have finally answered one of the oldest and thorniest questions in tax policy: What should constitute taxable income to a life insurance company?

A bill establishing a new and broader formula for taxing life companies was sent by Congress to the White House last week. The Treasury is satisfied with the bill as finally adopted, and Pres. Eisenhower is expected to sign it.

The new bill would replace legislation adopted as a stopgap in 1955. It is the first permanent life insurance tax legislation to clear Congress since 1942, though Treasury and tax experts in Congress have made repeated attempts.

• **Definition Trouble**—The problem in life insurance taxation has always been to define income for tax purposes in such a way that legitimate reserves to meet policy obligations are not adversely affected. What appears to be income one year may turn out—20 years later—to be needed to pay death claims.

In addition, the problem is complicated by mutual vs. stock company rivalry, which has blocked past efforts to work out new legislation. A mutual company is owned by its policyholders, to whom it distributes as dividends whatever money it makes. A stock company, by contrast, is owned by stockholders, and it behaves like any other corporation. The disagreement between the two types stems from the different ways they divide up their earnings.

• **More Revenue**—The new bill meets the first requirement of the Treasury Dept.: It produces more revenue than the 1955 law. About \$320-million would have been collected from life companies under the old law. Under the new one, receipts will rise to \$500-million on 1958 income and to about \$535-million on the present year's earnings.

This bill also helps cut through the traditional mutual-stock rivalry by differing in two fundamental ways from the present legislation:

• It increases the amount of taxes on income earned on investments. At present, investment income—the money an insurance company earns on its invested assets—is the only income taxed; the 1955 law applied the regular 52% corporate tax rate to 15% of income accruing from investments. The new bill assesses the 52% rate against 21% or 22% of income from investments, depending on how well a company's investments have fared in recent years.

• **Income from underwriting**—in essence, premiums collected in excess of necessary reserves—will be taxed for the first time since 1921. Underwriting income has become increasingly important in recent years because of lengthening life expectancies and operating economies. For purposes of taxation, income from this source will be divided about in half. Half will be taxed at the regular corporate rate as earned, and half will not be taxed until it is distributed to stockholders—the theory being that as long as it is held as part of reserves it will not be taxable.

• **Who Gets Hurt**—The new bill is something of a compromise, but it could hit the stock companies harder because of the tax on underwriting profits. For the most part, mutual companies—which write about two-thirds of total industry business—have relatively little underwriting income and relatively high investment income. On the other hand, the stock companies generally have relatively low investment income and relatively high underwriting income. Thus, under the present law taxing only investment income, the mutuals have been carrying about 75% of the industry's total tax burden. Under the latest plan, their share would be reduced to 65% or so.

• **Accepting Fate**—As far as the life industry is concerned, the new bill leaves much to be desired, but, as one mutual company executive puts it: "The new legislation is the best of a practical world, mainly because

other companies now will have to assume more of the total tax burden."

The increase in taxes, however, will still strike the mutuals hard. Since their policyholders have to absorb the impact of higher taxes, dividends will eventually be affected. One mutual company official says that it will be practically impossible to offset higher taxes by boosting investment income. "It just can't be done," he moans. "We fought to get our yield up this year in anticipation of the new legislation. But any gain we made—and it was substantial—was wiped out by the new tax structure."

The outlook is also cloudy for stock companies. Higher taxes will tend to reduce earnings of these companies, and this will affect their dividend rate.

• **Special Victims**—In particular, the so-called "specialty companies"—companies writing only special forms of life insurance—will face a much heavier tax load. Many of these write term insurance in conjunction with installment sales contracts. For term insurance, only a relatively small amount of reserves are necessary under the law; income from invested assets is therefore a small item to such companies, and their tax liability under the old law was small. But profits from underwriting have been traditionally large, and these will now be tapped by the Treasury.

This will mean that the specialty companies will work extra hard to cut down on their underwriting profits. Says Leo Spanyol, vice-president of Patriot Life Insurance Co. of New York, a C.I.T. subsidiary: "The new bill will encourage specialty companies to do more of a full-line business, rather than stick to only specialties."

• **Consolations**—One solace for the stock companies is that stockholders get a break in the bill. They will now be entitled to take the \$50 a year deduction in dividend income and the 4% dividend credit allowed stockholders in other types of corporations.

The life companies also managed to get other concessions in the Senate version of the bill, as against the original House version. For one thing, some \$60-million in additional taxes was lopped off from the original version.

Another of the changes clarifies the handling of income received by insurance companies from tax-exempt securities and in the form of intercorporate dividends. Senators feared the wording of the House bill would result in taxing income from these sources—which under general tax law is either tax-free or only partly taxable. As finally

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O.K.'d the bill explicitly states that if the new definition of taxable income results in a levy on income that otherwise would be tax-free, the tax base can be adjusted to conform with the federal laws.

The bill in its final form also gives special treatment to new and growing companies, but on a slightly less liberal basis than the Senate wanted. In the Senate bill, losses sustained during the first five years of a new company could be carried forward 10 years. The House insisted that the carry-forward be limited to eight years, and the Senate agreed.

Emerson, Webcor Link Comes Unstuck Again

Emerson Radio & Phonograph Corp. and Webcor, Inc., are locked this week in another spat.

Plans were made six years ago for the two companies to merge. Both are in the radio and hi-fi business, Webcor with \$15.5-million in assets and Emerson with \$38.6-million. On the very day of the proposed merger, Benjamin Abrams, Emerson president, had to tell his assembled stockholders that the deal was off. Webcor stockholders had balked at the \$8 per share offer as being too low.

• **Another Try**—Abrams persisted, however. Over the years, he accumulated about 4,000 shares of Webcor, and last month he proudly announced that Emerson had made a deal to buy 130,000 shares, about 20% of Webcor's common, from Titus Haffa, Webcor chairman, and his family. Abrams admitted he had to pay above the \$19 market price, but the deal would make Emerson the largest single stockholder in Webcor.

This week the deal threatened to fall apart. Emerson filed a petition in a Cook County (Ill.) court for permission to examine Webcor's books. Abrams said Webcor had defaulted on "certain warranties" by Haffa in the purchase agreement.

"Webcor engaged in transactions with Haffa or his relatives, or corporations or entities owned by Haffa and relatives," says Abrams, declining to be more specific. Emerson wants to carefully examine each of these alleged transactions and consequently determine if Haffa's "numerous representations of Webcor's assets and liabilities are accurate."

Walter P. Altenburg, Webcor counsel, informed Abrams that the deal is off, since it was based on certain performances that Haffa "could not carry out." But Abrams retorts that he has possession of the stock and he doesn't intend to let go of it. **END**



HENRY Z. STEINWAY, PRESIDENT, STEINWAY & SONS, PHOTOGRAPHED BY KARSH

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KEYSTONE

Those S&L Stocks

Holding companies, increasing fast, rush new issues as Congress ponders a law that could halt their growth.

A wave of stock issues of savings and loan holding companies is hitting the market one skip ahead of proposed Congressional legislation that could halt the holding companies' rapid growth.

The infant savings and loan holding companies are a little-known financial phenomenon, existing thus far only in the western part of the country. In fact, stockholder-owned S&Ls, themselves, are permitted by law only in 11 western and midwestern states, operate mainly in five. Of the 6,000 or so S&Ls in the nation, only about 500 are stockholder-owned. The rest are mutually owned—with each holder of a savings account having one vote in the election of management, regardless of the size of his account.

• **Growth**—But over the past four years, S&L holding companies have sprouted fast in the states where they can function. Henry A. Bubbs, chairman of the legislative committee of the U.S. Savings & Loan League, puts their present strength at 25, while William J. Halahan, of the Federal Home Loan Bank Board, testified before the House Banking Committee last week that "at least a dozen savings and loan holding companies in existence or projected control ... not less than 40 S&Ls."

Today more of them are putting their shares before the public, while some of the older ones are cashing in part of their chips:

• San Diego Imperial Corp., a California holding company set up in 1956, offered 1.4-million shares last week at \$9.25 per share. Among other things, it controls five S&Ls and a Colorado insurance agency. It proposes to purchase two more Texas S&Ls, and repay some bank loans with the proceeds of the offering.

• Wesco Financial Corp., a California holding company incorporated last March, this week offered 387,300 shares. It owns one California S&L and may acquire others. Part of the proceeds will go to present owners, who are selling some of their holdings.

• Financial Federation, Inc., another company incorporated last March, has registered an indefinite number of shares. The company owns eight California S&Ls with assets of more than \$175-million. It's going to market partly for more working capital, partly to repay a \$4.2-million bank loan incurred in acquiring a subsidiary.

• First Charter Financial Corp.,



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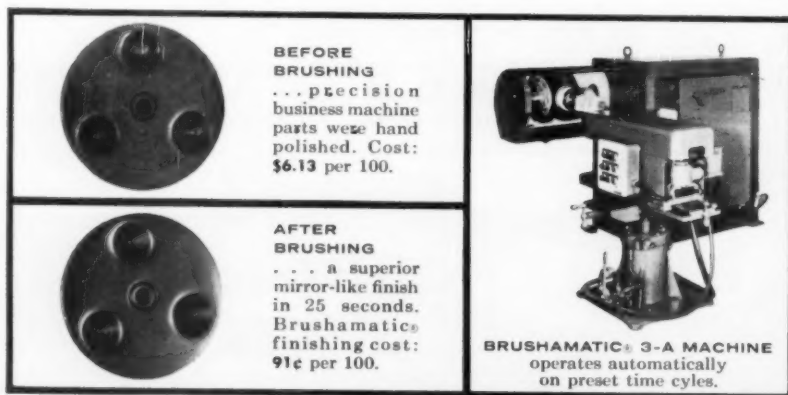
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of California, filed registration for 3-million shares. Proceeds will go to present stockholders. The company owns five S&Ls, five California corporations licensed as insurance agencies, and one licensed as a real estate broker.

This rush of offerings comes as Congress debates the pros and cons of curbing S&L holding companies.

• **Federal Insurance**—A bill before Congress would deny federal insurance of savings accounts to S&Ls newly acquired by holding companies and to existing subsidiary S&Ls controlled by holding companies making new acquisitions. Under the law, a holding company is defined as a company holding 10% or more of the stock of a stock-type S&L. Similar provisions have come before Congress in the past few years, but all have been grounded in committee.

One of the main arguments against the stockholder-owned S&Ls and their holding companies is that they receive preferential tax treatment. Since 1952, S&Ls, like mutual savings banks, are allowed to set up, out of earnings, a reserve equal to 12% of deposits before the S&Ls become liable for the regular 52% corporate tax. This is done for protection of depositors.

This tax privilege has been automatically extended to stock-type S&Ls. So long as they didn't go over the 12% mark, they were not taxed. This tax structure, among other reasons, has been a terrific lure for S&L holding companies and their shareholders. As savings accounts increase—and part of the S&L's ability to draw savers is the fact that earnings of the reserve fund are available to sweeten dividend rates—and more loans are made, the holding companies find their assets and net worth growing, which eventually should favorably influence the market price of the stock.

• **Advantages Claimed**—The backers of S&L holding companies, however, take offense at the charge that the holding company "tends to take rather than to give." They cite these main advantages of holding companies:

• They allow a stock-type S&L to get a salable unit before the public. In California, for instance, where stock-type S&Ls hold about \$4-billion out of the total \$7-billion of S&L assets in the state, the law doesn't permit stockholder-owned S&Ls to split their stock; thus, Wesco Financial in acquiring Mutual Savings & Loan Assn. of Pasadena—which had only 600 shares outstanding—issued 2,000 of its own shares for each share of Mutual stock.

• It allows S&Ls to broaden their operations. In most states, S&Ls are prohibited from making loans beyond a 50 mi. radius; the holding company can go beyond these limits. **END**



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In Finance

• • •

Bon Ami Stockholders Fail to O. K.

Bylaw Changes in Wake of Guterma Case

The Bon Ami Co. last week was blocked from pushing through changes in its bylaws which would clear the way for simplification of its capital structure and public financing. Only 57% of its class "A" shareholders approved the plan, short of the 75% approval required by the corporate charter.

R. Paul Weesner, Bon Ami president, says that the company needs to sell additional common stock now in order to replenish working capital that he says was "milked" from the company during the period that Alexander L. Guterma and his associates were in control (BW—Feb. 21 '59, p. 27).

Bon Ami's present capital structure, which Weesner calls "old-fashioned" and "archaic," has two classes of common—holders of the "A" shares must receive \$4 per share annually in dividends before the class "B" holders get anything. The company wants to substitute a single class of stock, with the "A" holders getting 1½ new shares for every share now held and the "B" shares receiving a one-for-one exchange. The "A" stockholders, however, reportedly are holding out for three new shares for every share now held.

• • •

Business Loans Jump Sharply

Demand for business loans, which has been particularly strong in banks outside of Chicago and New York, has spread to the big cities. Last week, for instance, New York City business loans jumped by \$367-million—the largest weekly rise in two years.

While a big part of the jump in borrowing is to meet tax payments, bankers say that a good portion of present loan demand is for non-tax purposes. Sales finance company borrowing, for example, rose \$127-million.

Since the March tax payment date, loan volume has experienced a smaller than usual decline. Finance experts think this same pattern will be repeated in the weeks ahead, with rising credit demands offsetting liquidation of tax loans.

• • •

Fed Proposal to Make Bank Reserves More Flexible Draws Patman's Fire

Rep. Wright Patman (D-Tex.), one of the Federal Reserve System's most persistent critics, this week came out with a scathing attack on a Fed-endorsed bill to allow banks to include their vault cash as part of required reserves (BW—Mar. 28 '59, p. 80).

The proposal, which has already passed the Senate, would increase the banking system's reserves by an estimated \$2.25-billion, but it would have no effect on credit

policy because the Fed plans to offset the increase in reserves through open market operations.

Patman, however, charges that this measure—together with other provisions that would give the Fed more flexibility in setting reserve requirements for individual banks and groups of banks—would "transfer the ownership of about \$15-billion of these government-owned securities to the private banks on a cost-free basis." Bankers ridicule this contention, describing it as a "pure flight of fancy."

Patman has also launched an attack on the internal auditing policies of the 12 regional Fed banks. He singles out "unrestrained and careless" entertainment expenditures by various banks, and the practice—discontinued in some banks—of giving rent-free space in Fed buildings to local clearing house associations and banking organizations.

• • •

Many Banks and S&Ls Are Hiking Rates on Savings Deposits

There has been a rash of savings rate increases by banks and savings institutions across the country. One reason is improved earnings on mortgages. But the competitive threat posed by the Administration's recommendation to hike the rate on U.S. savings bonds from 3½% to 3¾% is also helping to push the rates up.

In the state of Washington, commercial banks are lifting their rate on savings deposits from 2½% to 3%, effective July 1.

In Toledo, three commercial banks announced that, starting with their next semi-annual interest period, they will increase their savings rate a full 1%, from 2% to 3%.

Similarly, New York city mutual savings banks predict they will move from 3% to 3½% by the end of the summer.

In Miami, two S&Ls increased their savings rates last week to 4% from 3½%. Other S&Ls in the area are following suit. And in Denver, the S&Ls have completed a circle. In January, 1958, they boosted their rates to 4%, but, due to low earnings on mortgages during the recession, were forced to cut back to 3½% six months later. Now, on July 1, they're going back up to 4%.

• • •

Finance Briefs

As expected, New Jersey Gov. Robert B. Meyner last week signed into law the three bills that authorize the Prudential Insurance Co. to sell variable annuities (BW—Jun. 6 '59, p. 115).

Rumors persist that Montgomery Ward & Co. will soon move into the auto insurance field, through purchase of an established insurance company, to compete with Sears, Roebuck's highly profitable Allstate Insurance Co. Reports have linked Montgomery Ward with Nationwide Corp., a key holding company affiliate of the Nationwide Insurance group of Columbus, Ohio, but John A. Barr, chairman of the big mail-order house, said flatly they were "not true."



Adios, adobe !

Pueblo San Jose, dating from the earliest Spanish occupation of California, started as a slapdash collection of adobe huts. Not that there's anything wrong with adobe . . . baked mud was the best building material people could find at the time.

In 1957, the people of San Jose used the same approach when they built their new city hall. They used the best building material they could find: curtain walls of porcelain-enameled steel on a structural steel framework. The building is beautiful, and the price was low. Steel curtain walls are much lighter than conventional walls, so the building's foundation and structural frame are lighter—and less expensive. Construction time and labor costs were cut because steel curtain walls are *factory* assembled. They are delivered to the site as complete units that are ready to be bolted into place. Entire walls are erected in days instead of months.

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Standout Stamina On Workaday Jobs



Sure—when you have mammoth loads to haul—you naturally think of rugged Mack trucks. It's a known fact that Mack owns the secret of building units for the kind of grueling work that grinds down other makes over the long haul.

But workaday Mack trucks are built with exactly the same attention; to the same standards of precision and skill. That's why users will tell you a Mack runs up such an astounding number of scheduled job miles, without time off . . . trims back outlays for fuel, maintenance and parts.

Let's say you operate ten trucks, more or less. Ask Mack to show you how much you'll save when you replace

them with efficient Macks. Even if you operate one truck—ask Mack for the names of local users who can tell you how much a single Mack saves them every year.

Here's what one Mack user will tell you:

"Giving the best delivery service means delivering with the best equipment—so 100% of our fuel oil travels in Mack trucks. With up to 50,000 city miles per unit per year, we need the best transmissions—and get them in Macks. Our Macks have never had a breakdown due to mechanical failure. Our men say that they handle better than any other make." *This is a statement by a fuel oil distributor with over 7,000 customers. Name and full facts on request.*

IT'S PART OF THE LANGUAGE...

MACK TRUCKS, INC., PLAINFIELD, NEW JERSEY



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Look at the amazing things Alcoa Industrial Foil is doing!

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and here are picnic chests made with Alcoa Aluminum Foil to keep food kitchen-fresh, drinks refrigerator-cold

Take a new lease on the old-fashioned picnic this summer—throw away your sloppy baskets, heavy chests, leaky boxes. Now feather-light, moistureproof containers laminated with Alcoa® Aluminum Foil keep drinks cold, gelatins firm, garden salads fresh—all day—sun or shade. No need to bother with ice.

Two types of coolers make any outing an event. One contains a fitted aluminum set that breaks down to four serving dishes and a fry pan. Another is a rugged carry-all, a Stonewall® iceless ice box that's roomy for beverages, moistureproof for sandwiches. Use it for one season or several—little cost is involved.

These are the fun models of a new trend in packaging. Commercial shippers of poultry, fruit, flowers—any number of perishables—are switching to lightweight, disposable corrugated boxes laminated with Alcoa Foil. Why? Aluminum foil keeps moisture where it belongs . . . and package contents better insulated.

ALCOA does not make picnic boxes or other corrugated containers. Alcoa sticks to being a prime producer of aluminum foil, the amazing material that makes so many manufactured products work better, cost less. It forms, colors, twists, bends, combines with other materials, weaves into cloth, does other surprising things almost without number.

For more information about foil-laminated, corrugated boxes, write to ALUMINUM COMPANY OF AMERICA, INDUSTRIAL FOIL DIVISION, 1670-T Alcoa Building, Pittsburgh 19, Pa.

Look for this label . . . it's your guide to the best in aluminum value



For exciting drama watch "Alcoa Theatre," alternate Mondays, NBC-TV, and "Alcoa Presents," every Tuesday, ABC-TV

INTERNATIONAL OUTLOOK

BUSINESS WEEK

JUNE 27, 1959



Western Europe now is the favored spot for U. S. overseas investment. A lot of money is going into the stock of European companies. Still more is going into "direct investment" in manufacturing operations, usually by way of joint ventures with European companies.

This week's deal between Aluminum Co. of America and Britain's Imperial Chemical Industries is right in line with the upward surge of overseas operations. Alcoa has teamed up with ICI (on a 49%-51% basis) to form Imperial Aluminium Co., Ltd. (page 34).

There is new evidence, too, of American interest in European securities. To help promote its business in this field, New York's Bache & Co. is setting up shop in Frankfurt, West Germany (page 138). It will be the first American brokerage firm to operate a branch office in that country since World War II.

The Commerce Dept. has just released some first-quarter figures that show how American investment is booming in Europe.

According to Commerce, portfolio investment in Europe during this period totaled \$85-million. That compares with \$170-million for all of 1958.

Direct investment during the first quarter was \$240-million, up \$90-million from a year ago. And Europe accounted for 70% of all U. S. direct investment abroad. That's by far the largest share Europe has had in the postwar years.

U. S. direct investment in Western Europe reached an estimated \$4.5-billion by the end of 1958, or almost three times the 1950 total. At the rate it is growing today, the figure could double—to \$9-billion—by 1963.

Britain still accounts for the largest share of the European total—47% against 39% for the six Common Market nations. But the long-term trend is toward the Common Market, where economic growth is more rapid than in Britain.

Treasury Secy. Anderson now has British support for IDA—the proposed International Development Assn. This would be a soft-loan affiliate of the World Bank, with an initial capital of \$1-billion. It would operate along much the same lines as the State Dept.'s Development Loan Fund, and gradually would displace DLF.

Other industrial nations, including Germany, also are warming up to IDA. So it is almost certain that Anderson can get IDA approved this fall at the annual meetings of the World Bank and International Monetary Fund.

Washington and London still have some differences over IDA. For example, the British say that their colonies should be eligible for loans. The U. S. Treasury feels that London can take care of colonial development needs on its own.

The British also wonder where India will fit in. New Delhi has been getting hard loans from the World Bank on a large scale. If it were able to shift to soft loans from IDA, India would swamp the new organization. Yet, if an underdeveloped nation such as Indonesia can get to IDA, the Indians may insist on doing the same.

When it comes to deciding which countries are to get soft loans and

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
JUNE 27, 1959

for what types of projects, Anderson is sure that World Bank Pres. Eugene Black can come up with answers that will satisfy the British.

From Anderson's angle, IDA would have real advantages over DLF. We would be putting up only about a third of IDA's capital funds—contributions would be on the same basis as to the World Bank. Moreover, the other IDA members would have to ante up some gold and dollars.

The net effect would be to shift some of our foreign aid burden to other countries, especially to Western Europe. And that would help to reduce the current pressure on the dollar.

—●—

Argentina is grappling with the worst political crisis since Dictator Peron's downfall in September, 1955.

At midweek, Pres. Frondizi was holding his own against military officers who would like to see him out. There was a slim chance, though, that a military junta might take control. That would be a reversion to the kind of caretaker government that ran Argentina between Peron's overthrow and Frondizi's inauguration in May of last year.

Acute economic troubles triggered the blowup in Argentina. Last year, Frondizi clamped an austerity program on the high-living Argentines. He abolished subsidies for fuel, power, bread, and even beef—the country's main dish. He slashed imports. At the same time, he sought U.S. and foreign private capital to help develop rich oil resources.

By last week, the record looked good. Nearly \$1-billion in new capital and industrial contracts had flowed in from abroad. Trade showed a \$100-million surplus for the first time in years. The cost of living, up 120% since mid-1958, was at a grim but realistic level.

The political price, however, was too high. Austerity has undermined Frondizi's popular appeal. Peronista unions, which had backed his election, were staging strikes and riots.

Frondizi's sole support came from the armed forces.

Yet, last week, the officers showed that even they were fed up with Frondizi. They moved to overthrow the government. Striking back, Frondizi put key officers under house arrest and reshuffled several military commands. But then the entire cabinet quit.


At midweek, Frondizi appointed Alvaro Alsogaray as Economics Minister, with control over labor policies. Alsogaray is a champion of free enterprise and foreign capital. He served as Minister of Industry in the post-Peron provisional government headed by Gen. Aramburu.

—●—

In India, non-Communist political parties are roughing up the Communist government in southwestern Kerala State. They oppose Communist efforts to gain control of private schools.

The strikes and riots are putting Prime Minister Nehru on the spot. He visited Kerala this week to make peace. If he fails to back his own Congress Party's fight, he will be opening the way for further Communist advances in India. Yet, if he cracks down on the Communists, Moscow could withhold large chunks of Soviet economic aid slated for India.

Broadcasting has never had so many opportunities to do so much



*The whole world's grown so small.
It's like a tennis ball bouncing from
Berlin to Moscow to Main Street.
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rolls right back on to my front lawn.
Sometimes I'm not even sure what it's all about...
but I ought to know... I'd like to know...*

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They say Americans keep themselves well-informed. They're right! We're the best informed nation in the world. Millions of Americans constantly look at and try to appraise the world around and our problems on the home front... seeking a

deeper knowledge of the news and the men who make it. They sense that the more informed more of us are, the stronger we are.

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...an opportunity to see and hear many of the world's most distinguished and influential men give their answers to current problems on the WBC television and radio stations. It is the first time public affairs programs have been scheduled for multiple stations... on a regular, year 'round basis... in prime time when the greatest number of people can tune in.

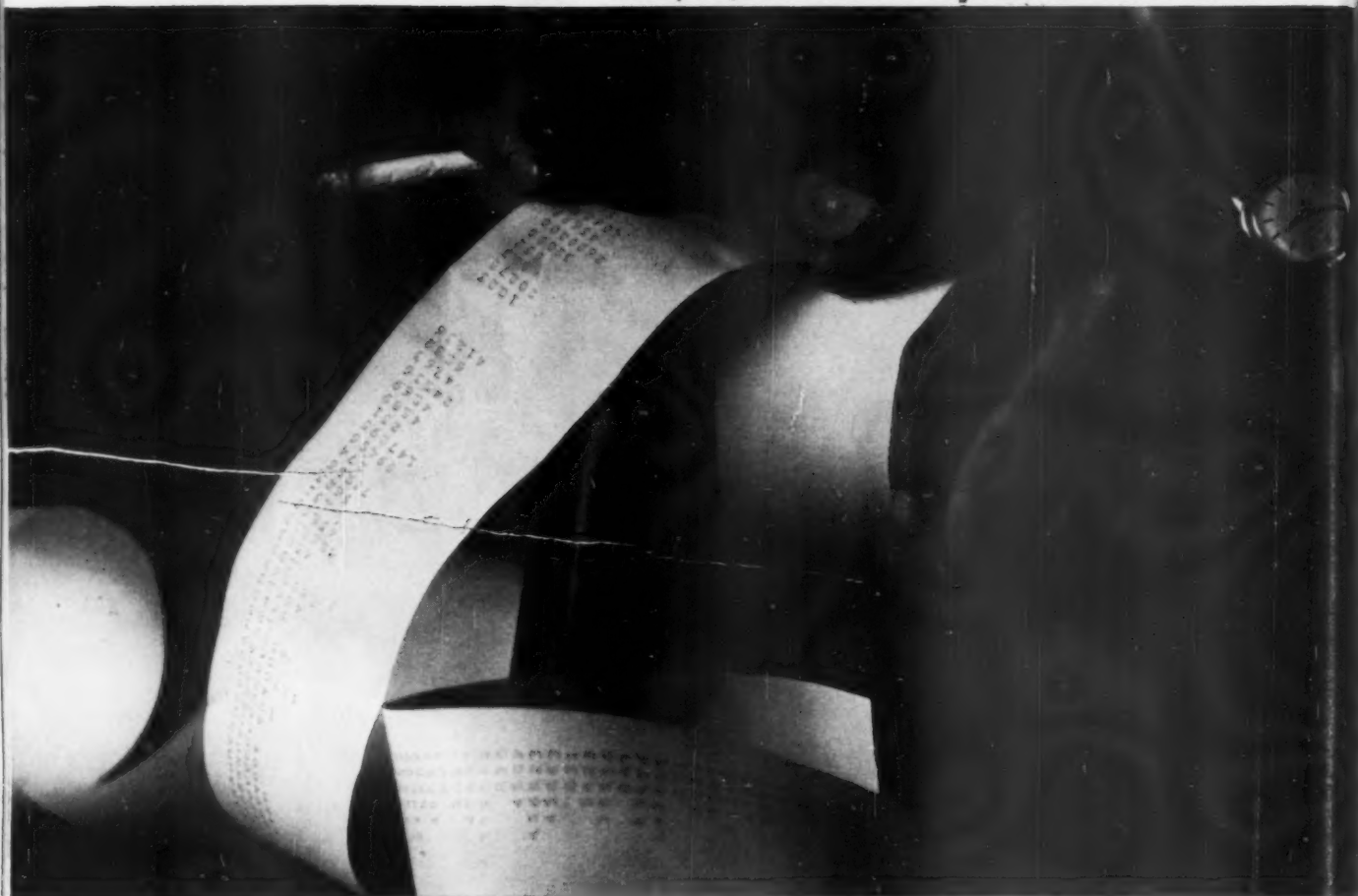
The programs are the well-known *American Forum of the Air* and *Youth Wants to Know*, produced by WBC in association with Theodore Granik. Some of the men and issues already presented: Castro on Communism in the Caribbean - Governor Faubus on segregation - Senator Goldwater on labor issues - Senator Keating on taxation - Senator Kennedy answering the searching questions of American youth.

WBC believes that broadcasting's opportunities today are beyond counting. And, that the American instinct to better our own communities... as well as to help others to help themselves... means that news and the men who make it are among the biggest areas of opportunity for broadcasting.

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LABOR

Labor Reform Fight Intensifies

● House Labor Committee is determined to draft a measure that Congress will accept.

● But it almost certainly will insist on a "bill of rights" for workers, bitterly opposed by AFL-CIO.

● Nevertheless, new developments are improving the chances for passage of reform legislation. The Teamsters, for instance, has proposed a substitute "bill of rights."

The drive for labor reform legislation reached a critical stage in Congress this week with one prospect almost certain—any bill placed before the House will contain a "bill of rights."

The House Labor Committee met behind closed doors to draft a labor bill, after Speaker Sam Rayburn (D-Tex.) called for prompt action. The House "must pass, if possible, a bill to stop as much of this racketeering as possible," Rayburn said, noting that time is running out on the legislators.

The committee immediately got down to often heated debate in executive sessions, using the Senate-passed Kennedy-Ervin bill as the working base for its efforts to draft a House bill.

• **Version May Differ**—Chances are that by the time the committee winds up its work, about two weeks from now, its legislative proposals won't look much like the Senate's version. Even so, the measure to be placed before the House is expected to include one key section adapted from the Kennedy-Ervin bill—a "bill of rights" that guarantees rights of union members to free speech and assembly within labor organizations.

Introduced in the Senate by Sen. John L. McClellan (D-Ark.), chairman of the upper chamber's rackets investigating committee, the rights section was later moderated. The easing of its provisions failed to stem strong protests from AFL-CIO unions, particularly disturbed over criminal penalties included in the section. Pres. George Meany, for the Federation, warned Congress that any reform bill including the controversial rights section would be "completely unacceptable" to labor.

Sen. McClellan, meanwhile, criticized the changes made on the Senate floor as "disappointing" and "disgusting" to those interested in real reform measures. Administration and business spokesmen also rallied to the support of rights guarantees.

• **New Strategy**—Thus, the "bill of rights" became the focal point of the reform fight. This has brought about

a significant change in union strategy. Labor had been ready, however reluctantly, to accept general reform legislation. But it has drawn the line at specific measures to go into internal union affairs, at no matter what depth.

Most of the present strong—and bitter—opposition in labor to the rights clauses stems from union complaints against provisions "destructive of perfectly legitimate procedures and customs which are necessary to the orderly . . . functioning of a labor organization."

• **Improved Chances**—Despite the heated opposition to the rights section, the chances for reform legislation are getting better all the time; they have changed in a matter of a couple of weeks from bad to good.

Three developments have made this possible:

• **Rep. Ludwig Teller** (D-N.Y.) put a new reform measure before fellow members of the House Labor Committee, one carrying with it his prestige as the committee's only professional on labor legal matters. His version includes a modified "bill of rights" that AFL-CIO might be persuaded to accept, but drops Taft-Hartley Act "sweeteners" the federation insists on.

• **The Teamsters**, which has been surprisingly effective in its legislative lobbying on reform, dropped outright resistance to such legislation. The truckers union, which is the top target of reform moves, proposed a substitute "bill of rights," a far cry from the Kennedy-Ervin proposals.

• **Meanwhile**, the "bill of rights" received surprise backing from the American Civil Liberties Union, which for seven years had argued that unions could police themselves. ACLU now says that "self-regulation alone cannot adequately protect the democratic rights of members within unions."

All of the current proposals on this section would insure the right of members to participate fully in union meetings, to criticize officers and union policies, to be assured equal treatment, and

to be given a fair hearing before an impartial tribunal. Similarity ends there.

• **Points of Disagreement**—The Kennedy-Ervin measure would permit a union member to sue a union officer for violations, giving him legal redress through the courts. This, Meany has charged, "would destroy the most effective right a worker has—the right to a strong and effective union."

The Teller bill refers to the "rights of members of labor organizations," but leaves insurance of such rights more in the hands of the unions themselves.

The Teamsters plan goes one step further; it would require that members' rights be written into union constitutions and would allow any member dissatisfied with justice inside the union to appeal to the Federal Mediation & Conciliation Service after six months—and then eventually to the courts.

• **Other Disputes**—The issue of a union member's rights is by no means the only item of dissension. The Teamsters, for instance, would like to keep out any legal ban on the "hot cargo" device used in their organizing and bargaining moves. The Teller bill, along with most others being debated, would ban it.

The AFL-CIO, in turn, insists on Taft-Hartley amendments to aid its building trades unions; Teller would omit these. But the latter's measure would give the Secretary of Labor less enforcement power than he would have under the Kennedy-Ervin bill. The "excessive power" is opposed by AFL-CIO and the Teamsters.

Management groups, for their part, are fighting against Kennedy-Ervin as too weak in its curbs on secondary boycotts and picketing, and too ineffective in its rights section.

• **Under Pressure**—While nobody has yet come up with a measure that can claim sufficient support, the House committee nevertheless appears determined to come forth with a reform proposal. It is likely to be wrenched out section by section in a series of close committee votes. The political pressure is strong for some kind of measure.

In total, the eventual bill is expected to add additional curbs on unions to the Senate bill. Even union lobbyists anticipate this. One veteran AFL-CIO leader noted: "They're going to nail us on this one."

This official is working within the AFL-CIO leadership to hold off trying for a moderate bill in the House. His theory is that it will be too tough to take, anyway, and the harder the bill is on unions, the less likely it is to get through Congress. **END**

Non-Steel Settlements Pile Up

● Though the spotlight is on steel, other industries and unions have bargained quietly and worked out contracts. Last week an important accord was reached in cement.

● Although many employers, like steel, have vowed to hold wage line, most are granting increases of 8¢ to 11¢.

● Other unions with bargaining in progress are waiting for the steel pattern before making specific demands.

Late last week, negotiators for the Ideal Cement Co. and the Cement, Lime & Gypsum Workers shook hands after an agreement on a two-year contract that ended a serious strike threat. The pact—providing an estimated 26½¢ wage and fringe package payable this year and next—meant labor peace for Ideal's 1,900 employees in 16 plants.

It could mean labor peace for the entire cement industry, as well. Early this week, at least two other companies—the Lone Star Cement Corp., with 10 plants, and the Penn-Dixie Cement Corp., with seven—apparently were prepared to go along with the Ideal-Cement Workers terms, a probable pattern for the industry.

• **Non-Steel Negotiations**—The settlement reached in hard bargaining by Ideal and its union is significant for this fact: While national attention riveted on steel negotiations as they rapidly approached a climax in New York, negotiations continued for millions of other workers.

The attention fixed on steel talks is understandable. Steel is a key industry which has an impact on the whole economy. It employs a half-million workers. And, very important, it is a pacesetter.

Nevertheless, the outside-steel negotiations, which involve three or four times as many workers, should not be ignored. They are not likely to set any broad wage patterns or to initiate new and significant benefit plans. But they may indicate just how far industry will be willing—and able—to hold a line against higher labor costs this year.

• **Steel Stands Pat**—Through midweek, the basic steel industry's negotiators refused to budge from opposition to any "net employment cost increase" in new contracts with the United Steelworkers. Their spokesman, U. S. Steel's R. Conrad Cooper, reaffirmed that the industry must "resist" any further "inflationary adjustment" of labor costs.

The wording was deliberately cautious and ambiguous. It could be—and was widely—interpreted to bar a

wage increase this year. At the same time, it could be read as an offer of an increase in pay if its cost could be offset by savings in other labor areas. Cooper suggested, for the industry, a list of ways these savings could be obtained through union concessions.

Late this week, steel negotiations seemed to be veering toward bargaining on a raise that could be defended as "noninflationary."

Meanwhile, other employers are approaching bargaining the same way, determined to hold a labor cost line. But substantial wage increases are being written into new contracts almost daily.

For instance, a million construction craftsmen—carpenters, plumbers, and others in about a dozen unions—have received pay increases averaging about 13.4¢ an hour so far this year, a little less than last year's 14¢ to 16¢ an hour but a gain of about 4.5% over the wage level of mid-1958 (BW—Jun. 20 '59, p. 58).

• **Building Trade Increases**—These wage boosts show up widely. Recently, Chicago plumbers received a 22¢ wage increase that lifted their journeyman rate to \$3.95 an hour, bricklayers got a 25¢ raise to \$4.07½ an hour. Houston carpenters and cement finishers won 18¢ and 17¢ raises. San Francisco electricians signed a new three-year contract providing total wage increases of from 49¢ to 57¢ an hour; carpenters there settled for 22½¢ an hour more this June, the same amount in June, 1960.

These are typical increases in an industry that has important bearing on the course of the economy.

• **Cement Accord**—In a construction fringe industry, the cement industry, the Cement, Lime & Gypsum Workers originally asked for a 15¢-an-hour raise, plus a long list of fringe gains. Talks continued past the May 1 expiration date of contracts with a growing threat of a nationwide cement strike.

Last week, Ideal and the union agreed:

• Wages will go up 10¢ an hour retroactive to May 1, another 10¢ an hour on May 1, 1960.

• The company will establish a supplementary unemployment benefits plan at an initial cost of 3¢ an hour for each employee; if the 3¢ isn't adequate for a satisfactory reserve, the payment will go up to 5¢ next year.

• Premium rates will be paid for Sunday work, regardless of the total number of hours worked in the week.

• Vacation, medical, and sickness and accident plans will be liberalized.

The "fringe" gains are estimated by the union at about 6½¢ an hour. The total increase of 26½¢ an hour over the next two years is "a fair settlement" that will be sought for 27,000 workers employed by 50 companies, a Cement Workers spokesman announced.

Impact? The ink was hardly dry on the Ideal contract before industry spokesmen were talking of the likelihood of a cement price increase—perhaps 15¢ a barrel—shortly after the first of the year. Many companies have guaranteed prices until then.

• **Paper Contract**—In the paper industry, the International Paper Co. and three unions settled last weekend for upwards of 15¢ an hour in raises over the next two years, plus fringe gains. Contracts covering 13,000 employees in 10 Southern mills will give a 3% raise, with a minimum 7¢ an hour, this year, another 4%, with an 8¢ minimum, in mid-1960. The terms are expected to be the pattern for some 75,000 workers in the South's paper industry.

In other sections, paperworkers have been signing for raises of from 5½¢ to 14¢, with the average about 7½¢.

The Oil, Chemical & Atomic Workers ended a 40-day strike at two E. R. Squibb plants, in Brooklyn and New Brunswick, N. J., for a 5½% wage increase now, 3½% more in 1960. Parke, Davis & Co., in Detroit, settled for an 8¢ raise this year, another 7¢ in 1960, for its 1,650 employees. Chemical industry raises have been at similar substantial figures.

• **Apparel Rises**—In textile and apparel industries, workers have received pay hikes ranging from 7½¢ an hour to 10¢. Last week, makers of men's shirts announced a price increase. Massachusetts shoe manufacturers and the United Shoe Workers signed for a 5¢ raise this year, 3¢ in 1960, for 12,000. Nationally, raises for telephone workers have been in a \$3- to \$4-a-week range, somewhat less for unskilled employees.

Over-all, raises this year are falling into a median pattern of 8¢ to 11¢ an hour, with fewer "zero" settlements and more for 11¢ or higher. Fringes have added to the increases in labor costs. For instance, rubber negotiations



Photograph, using model jet airliner and simulated radar beams, illustrates how Bendix Doppler Radar Navigation System operates.

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Bendix Doppler Radar literally "bounces" radar beams off the earth's surface, as pictured above, to gather this navigation information. Because it instantly lets the pilot know whether he is being slowed by head winds or speeded by powerful "jet stream" tail winds, he can quickly

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—on nonwage issues only—resulted in fringe gains having an estimated cost of about 5¢ an hour. Rubber manufacturers are talking about price increases in the latter part of the year—after wage terms are set in bargaining that will get under way shortly.

• **Deferred Raises**—Obviously, this steady flow of wage-fringe gains by unions creates problems for steel and other industry negotiators intent on holding a cost-price line. And, these problems are greatly intensified by the deferred raises under long-term contracts this year. These include raises for nearly a million workers:

• 5½¢ to 9¢ in July under International Assn. of Machinists contracts in the aircraft industry.

• 2½% (6¢ an hour or more) in August, under United Auto Workers contracts in the auto industry, or similar raises later in the year under some contracts with farm equipment makers.

• 5¢ to about 12¢ under electrical manufacturing contracts, including that of General Electric, which calls for 3.46% and a minimum 5¢ in September, and of Westinghouse, 3.5% and a minimum 5¢ in October.

These increases set a floor under union demands; unions will resist, strongly, any settlement for less.

• **Waiting for Steel**—However, most labor negotiators now bargaining with employers have not set specific wage demands. They are holding back for a steel pattern, meanwhile cloaking their goals in evasive terms of "substantial" gains. This is true in the nonferrous industry, in which the Mine, Mill & Smelter Workers and almost a score of other unions are bargaining toward a June 30 contract expiration date.

When Anaconda and other companies proposed a one-year extension of contracts without a wage increase MMSW rejected the suggestion. In words reminiscent of those of the Steelworkers in New York, it commented that it "can't accept zero as a figure" for a wage settlement.

With negotiations getting nowhere, MMSW talked this week of a strike but decided—out of weakness—to continue bargaining past the contract expiration.

• **Aluminum Talks**—Meanwhile, negotiations got under way quietly in the aluminum industry, with companies showing the same resistance to "inflationary" demands that the steel employers had been showing for more than six weeks.

Adding to other unions submitting contract demands at the start of the busiest negotiating season (BW—Jun. 20'59,p58), the National Maritime Union served notice this week that it wants to negotiate a 1959 wage increase under a wage reopening clause in contracts with 75 companies. **END**



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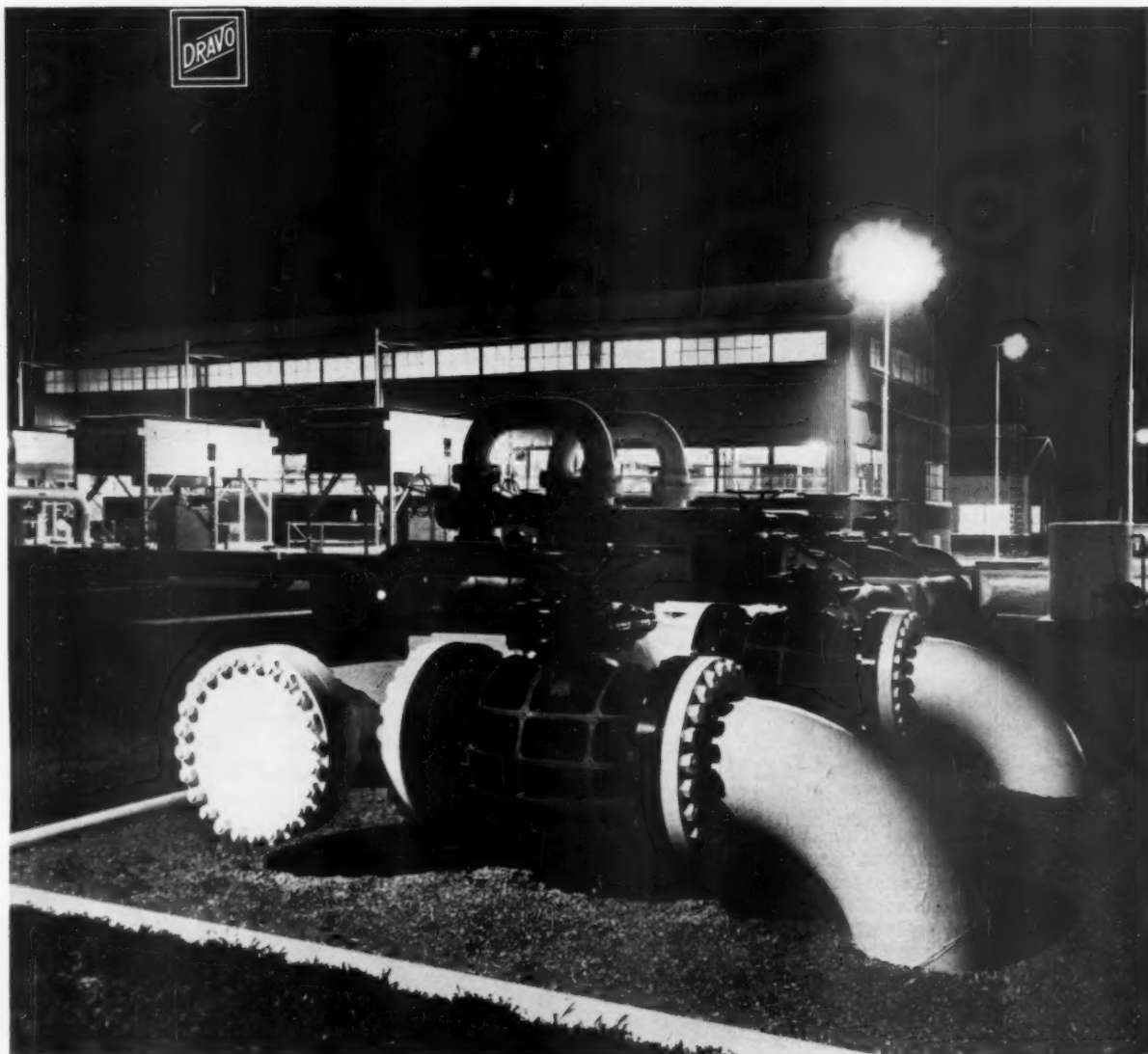
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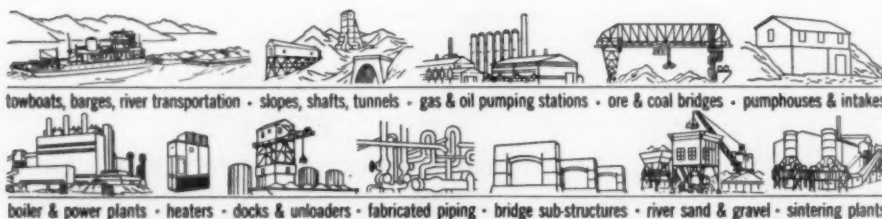
New station stockpiles gas in 90 wells

At McArthur, Ohio, a new Dravo-built compressor station is helping Ohio Fuel Gas Company meet ever-increasing gas requirements in Central and Northern Ohio areas.

The facility is a key link in the Company's north-bound transmission system. In addition, the station pumps gas into 90 wells in a 12,000-acre underground reservoir. During peak load periods, Ohio Fuel draws on this 10½-billion cubic foot capacity

storage supply to meet the needs of its customers.

Under a complete "package" contract, Dravo performed all installation and erection services as well as shop and field fabrication of piping. This resulted in rapid completion, low total cost and assurance of meeting rigid specifications. It is another example of the engineered products and services Dravo has offered industry for more than 65 years. For more information, write DRAVO CORPORATION, PITTSBURGH 25, PA.



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In Labor

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Cost of Living: What's Happening to It

	Total Cost of Living	1947-49 = 100			
		Food	Clothing	Housing	
				Total	Rent Only
May, 1951	110.9	112.6	106.6	112.2	112.5
May, 1952	113.0	114.3	105.8	114.0	117.4
May, 1953	114.0	112.1	104.7	117.1	123.0
May, 1954	115.0	113.3	104.2	118.9	128.3
May, 1955	114.2	111.1	103.3	119.4	130.3
May, 1956	115.4	111.0	104.8	120.9	132.2
May, 1957	119.6	114.6	106.5	125.3	134.7
May, 1958	123.6	121.6	106.7	127.8	137.5
June	123.7	121.6	106.7	127.8	137.7
July	123.9	121.7	106.7	127.7	137.8
August	123.7	120.7	106.6	127.9	138.1
September	123.7	120.3	107.1	127.9	138.2
October	123.7	119.7	107.3	127.9	138.3
November	123.9	119.4	107.7	128.0	138.4
December	123.7	118.7	107.5	128.2	138.7
January, 1959	123.8	119.0	106.7	128.2	138.8
February	123.7	118.2	106.7	128.5	139.0
March	123.7	117.1	107.0	128.7	139.1
April	123.9	117.6	107.0	128.7	139.3
May, 1959	124.0	117.7	107.3	128.8	139.3

Data: Dept. of Labor, Bureau of Labor Statistics.

©BUSINESS WEEK

May Price Index at All-Time High; State, Local Tax Rises Add to Pressure

The government's monthly cost-of-living index climbed to a record high in mid-May—124% of 1947-49 average prices, a level that topped the previous high of 123.9% reached in July and November, 1958, and again this April. The Bureau of Labor Statistics expects further rises this summer.

The latest index reading is a gain from 123.6% in May a year ago. However, a relative stability is shown by the slight fluctuations since then (table).

All major factors of the c-of-l index contributed to its rise. Most of the pressure came from housing, medical care, and personal care. But, after eight months of decline, food prices rose to help nudge the index upward.

A BLS spokesman noted that the rise also reflects increases in state and local taxes—for example, a higher New York City cigarette tax.

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Labor Economist Sees 40% Gain In Workers' Real Income by 1975

Most employers are now concerned with contracts to be negotiated with unions in 1959 and 1960. But, what about labor agreements in 1975? Where is today's bargaining headed?

Clark Kerr of the University of California, one of the country's authorities in labor economics, has given employers something to think about with four educated guesses. In discussions of the prospect for wages and hours in 1975, Kerr foresees:

- A considerable shortening of hours of work, perhaps a 1,700-hour work year instead of 2,080 hours.
- Premium rates for workers on disagreeable jobs, more than to skilled employees—who will constitute a much greater part of the work force.
- A substantial rise (perhaps 40%) in real income.
- Through the years, a greater rise in wages than in productivity, causing a "mild" inflation.

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Union Pioneers a Pension Plan That Adjusts to Cost-of-Living Index

The rise of living costs in recent years has led to union pressure on many employers for pension increases—in some instances for plans that would link monthly retirement pay to the rise and fall of the federal cost-of-living index, just as wages of millions of workers are linked to it now.

Next week, almost 10,000 workers in the Chicago area will come under such a pension escalation plan. Their Chicago Truck Drivers Local 705 (not affiliated with the Teamsters) has written into contracts with three associations (about 1,200 employers) a plan that will get close attention in labor-management circles.

Under it, retirement pay—including that of 130 who already have retired—will be subject to adjustment annually if the Bureau of Labor Statistics' c-of-l index is 124 or higher. The monthly pension will go up \$5 for every three-point rise in the index.

For instance, if the index is between 121 and 123.99, the pension benefit will be at a \$75 minimum; between 124 and 126.99, \$80 will be paid; between 127 and 129.99, \$85, and so on. A drop of three points will cost retirees \$5 a month, down to the \$75 minimum.

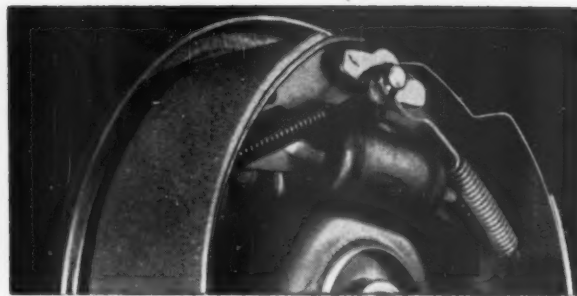
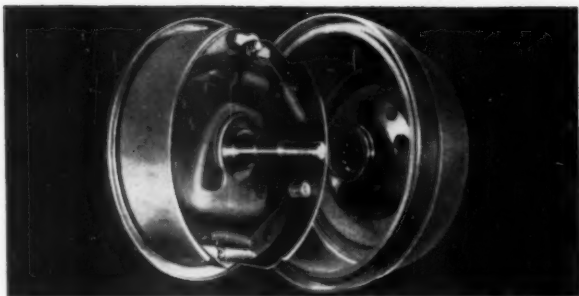
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Public Utility and Hospital Strikes Settled in New Jersey, New York

Two long strikes in the Greater New York area ended this week. In New Jersey, a 39-day strike against the Public Service Electric & Gas Co. was settled with a 5.18% hourly wage hike, plus additional fringes in a one-year contract from May 1. In New York, house-keeping employees at seven voluntary non-profit hospitals returned to work as a result of a settlement formula, which included wage increases and a grievance machinery, worked out at City Hall.

Despite occasional outbreaks of violence during the strike, the outlook for labor peace seems good in New Jersey as the utility and the union resumed their contractual relationship. But conflicting interpretations of the hospital peace formula in New York marred the settlement as members of Drug Local 1199 of the Retail, Wholesale & Department Store Union approved.

The union sees the peace formula as providing a "back door recognition" and says, "We'll be in the front door before long." The hospital managements, however, have yet to concede that the union is even at the servants' entrance.



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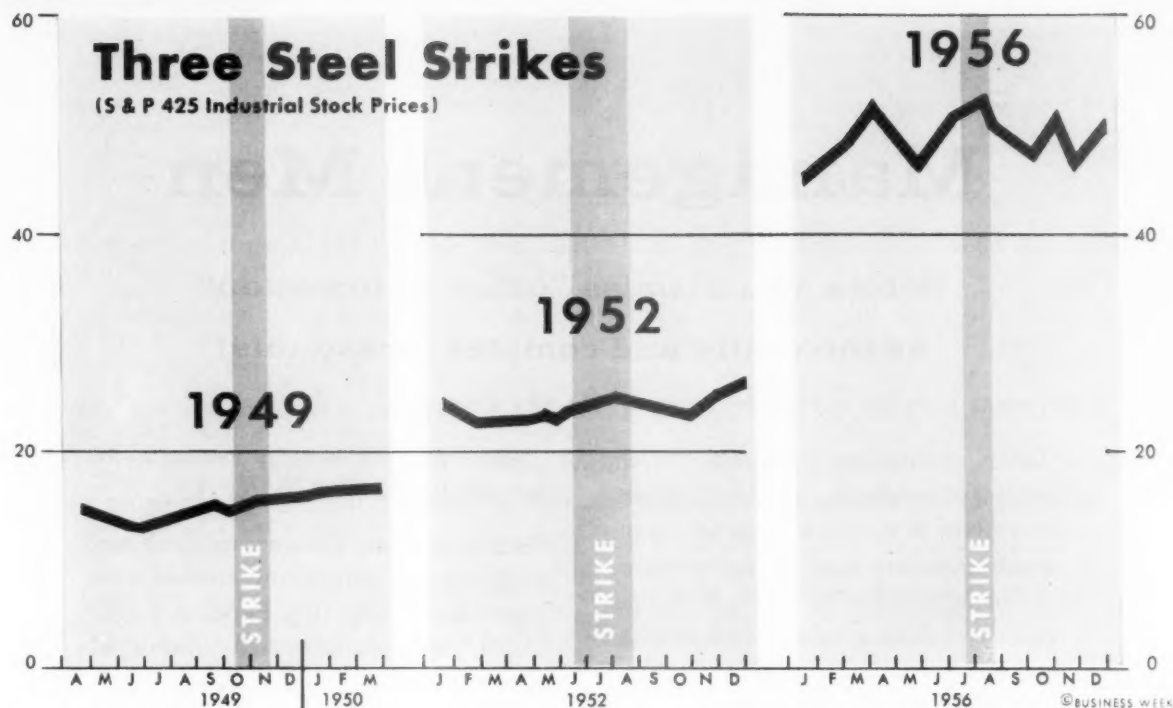
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THE MARKETS



They Didn't Upset Prices Before

Analysts warn, however, that today's market is different. Despite the stability of institutional investment, it shows signs of strain. And there's the public's fear of inflation to be considered, too, as a market factor.

With steel negotiations coming down to a June 30 deadline, Wall Street is interested in what will happen to the stock market if there's a steel strike. The answer is not easy to come by, but evidence (charts above) suggests that a mill shutdown would not measurably affect the basic trend of stock prices.

As the charts show, investors have not been seriously disturbed by steel strikes. Even in comparatively long strikes, there hasn't been any real distress selling. Even in those few cases when there has been a downward trend, stock prices have bounced back after the strike.

• **Three Cases**—In the 1949 strike, for instance, Standard & Poor's index of industrial stock prices stood at about 15.48 before the October shutdown; it had been moving upward during the year. The initial impact of the strike forced stock prices to retreat somewhat, but, even while the strike was on, they started to climb again.

In the 1952 strike, which lasted from

July to mid-August, stock prices steered a different course. Just prior to the strike call, stock prices fell in anticipation of the news. They climbed during the strike itself, then fell back sharply in early fall. By December, however, stock prices were at a year's high.

Prior to the 36-day strike in mid-1956, the stock market had risen to a record high. Analysts, in looking back, now think that the strike played only a minor role in the collapse of the stock market in early fall. In any case, the market rallied after the strike was over and went on to hit a new peak in mid-1957.

• **This Year's Difference**—But analysts say that if you look beyond the charts, you'd have to hedge your conclusion about what will happen if a strike is called next week. They cite two reasons:

• This market is somewhat different from past markets. Through increased equity investment by institutions—mutual funds, pension funds, and banks—it has achieved a new built-

in stability. The New York Stock Exchange's latest census of shareholders, for example, points out that institutions hold 17.5% of all outstanding shares, compared with 15.7% in 1956. Even so, the present bull market has been showing signs of strain in the past few months, and it's becoming increasingly vulnerable to wide swings.

• Each of the past settlements in steel disputes has been regarded as inflationary. As one student of the stock market puts it: "Steel strikes in themselves don't mean too much to either the sophisticated investor or the public. It's the inflationary tendencies associated with them that really moves markets."

Analysts say it will make a big difference to the market if the settlement eventually arrived at this year is considered non-inflationary—as many people are beginning to think it will be.

• **Pattern**—This is really the key point to how the market may react. Wage settlements in steel have often served as a pattern for over-all industry. Substantial wage increases, followed by further steel price increases, have helped nudge the "wage-price" spiral, thus feeding the inflation fears of investors.

If the settlement this year is modest in scope—and isn't followed by higher

Management Men

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steel prices—the present inflationary air in the market may be cooled. A settlement of, say, 10¢ an hour or less would raise the hope that there won't be a new wage-price spiral.

• **Inflation Hedging**—Investors may feel that common stocks as a hedge against the gradual depreciation of the dollar have been overrated. Indeed, this may be the beginning of a switch to the bond market, where yields have climbed to 20-year heights and are well above stock yields.

However, this cooling probably will occur only if the settlement is deemed a moderate one. A more "liberal" settlement could set off a new round of inflation.

More than that, such a settlement, say analysts, would reinforce the public's gloomy forecasts that inflation is inevitable. If so, the psychological impact could be terrific, coming as it might in the midst of a new surge in capital spending.

What's more, if history is any guide, investors would have sound reason to throw money into the stock market on the heels of a "liberal" settlement. For in each of the past big three strikes, the shutdown's effect on general business has not been great.

• **Effect on Cycles**—The last three steel strikes came at varying stages of the business cycle. In 1949, the business recovery was just getting under way. The 1952 strike occurred when the economy was winding up a major adjustment of inventories in the wake of a post-Korea buying spree. In 1956, the U.S. was in the midst of a capital spending boom.

In each instance, steel production, as well as production in other industries, was hit hard, but the effect on other business indicators was moderate. None of the three strikes was followed by an economic decline. In fact, each settlement was followed by a brisk pickup in business activity and an improvement in corporate profits.

Most analysts predict that if there's a steel strike this year, business will follow a similar pattern. They feel there might be a slight decline in the Federal Reserve production index during a one-month strike, but business should rebound quickly and the impact on corporate profits would be small.

But they are less sure now than six months ago as to how far business will rebound from a strike. Many, in fact, are taking their cue from the present uncertain state of the stock market.

• **Market Range**—For the past few months, stock prices have been moving in a relatively narrow range; this week, they were still showing the strain of a 4% correction a few weeks back.

Actually, the stock market, as measured by the popular stock averages, has gained only about 2% since the end of 1958. Many analysts say that the mar-

ket's slow pace is a forecast of a slower recovery than the initial burst of the business upswing had indicated.

With or without a strike, these analysts feel, investors will pay more attention to earnings and dividends in the coming months. The big year-to-year earnings gains that were evident in the first quarter will be shaded as the year goes on. Analysts say the second half will be the real test of a company's progress.

• **More Stock Issues**—The market, they add, is undergoing a shift in its makeup. For one thing, there has been a sharp increase in the flotations of new common stock issues. The Securities &

Exchange Commission recently reported that common stock financing in the first quarter rose to \$511-million, compared with \$289-million a year ago. As debt financing gets more costly, analysts reason, more stock issues will come before the public, thus help to balance both supply and demand of stock.

Another development has been the gradual shift toward investment in special situations—stocks that are expected to act independently of the market as a whole. Such a shift, claim a number of analysts, usually provides an explosive climax to a bull market.

Crackdown on High-Rate Lenders

New Federal Reserve regulations cut down supply of funds that allegedly have fed stock market speculation.

An important source of funds for stock market speculation—New York's high-rate money lenders—is being shut off. This week, commercial banks are calling their loans to such lenders, in response to the Federal Reserve's newly tightened regulations governing bank loans made for the purchase or carrying of securities (BW—May 16 '59, p34).

Faced with this credit squeeze, one lender, Judson Commercial Corp., said it's going out of the security lending business. Another, Jerry Pressman, who operates the Silver Co., says "to describe Silver Co. as inactive would be the understatement of the year." Reldan Trading Corp. says it hasn't made any loans since the Fed's new regulations went into effect June 15. Other lenders admit they're considering closing shop.

• **Feeding Speculation**—This effect of the Fed's tightening of Regulation U is no accident. The Fed has been concerned about the activities of the high-rate money lenders, who helped speculators avoid the 90% margin requirements. It felt that the money lenders were contributing to the market's speculative excesses, and it was out to arrest their activities.

Up to now, high-rate lenders were prepared to advance 60% or more on stock collateral, charging from 1% to 2% a month on the funds advanced (some lenders on special deals charged as much as 5% a month). In contrast, brokers can allow a stock purchaser to borrow only 10%, while banks, which have cut back sharply on stock loans, were not supposed to lend to borrowers who wanted the funds for new stock purchases.

• **Legal Evasion**—The money lenders thrived because of the restrictions applying to brokers and banks. They were able to borrow from the banks using the same security collateral that the lenders had originally received from their

clients. In effect, securities were being "hocked" twice. The lenders themselves were operating on thin equities, and they relied on the banks to supply daily cash needs.

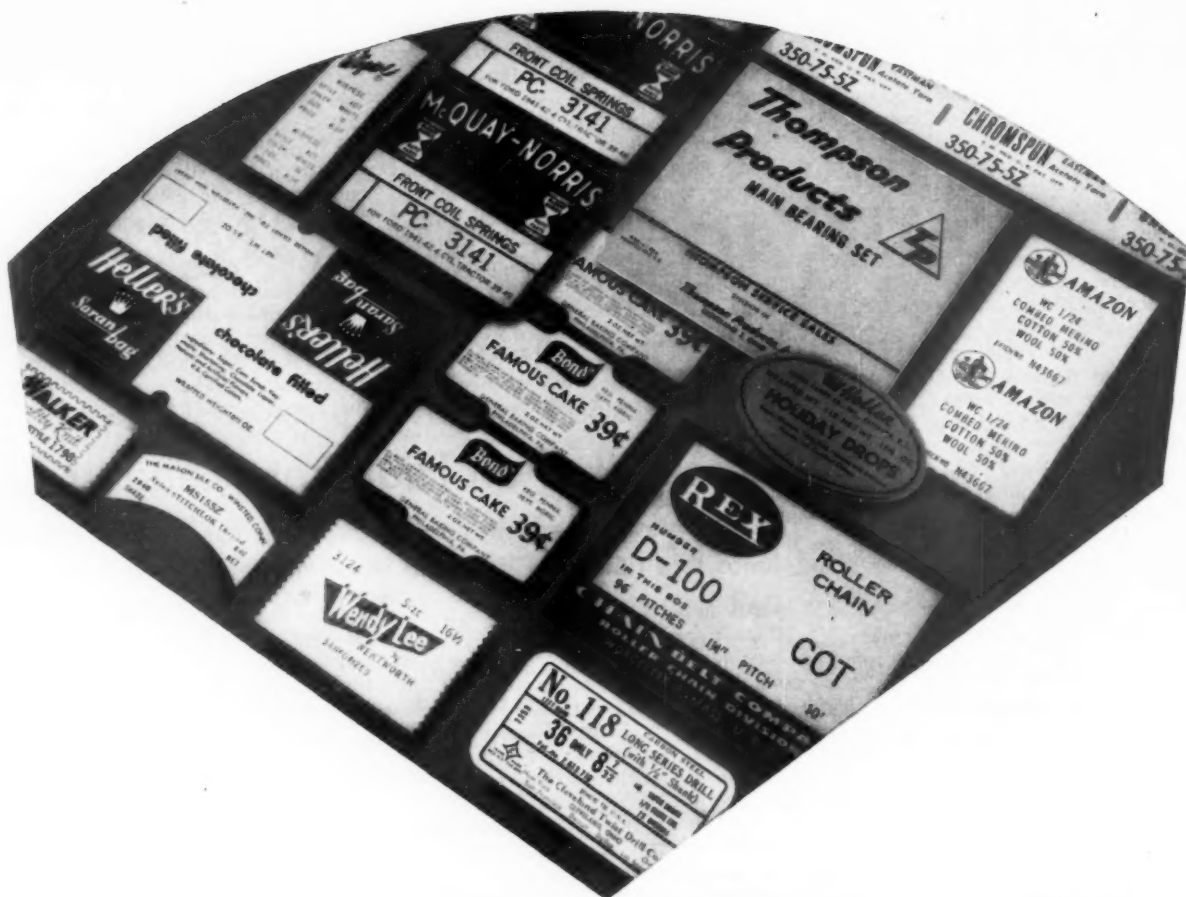
All this was perfectly legal. The high-rate lenders are neither brokers nor banks, thus are not subject to the Fed's margin rules.

But both the Fed and the Securities & Exchange Commission took a dim view of their activities as a stimulus to speculation. And the Fed's tightening of stock market regulations was aimed at curbing this type of speculation.

• **Plugs for Loopholes**—The board added two new sections to Regulation U. The first requires "unregulated lenders" to file reports on their activities with the Fed. The second—and the one that really put the squeeze on—rules, in effect, that bank loans made to individuals engaged principally in the business of making loans for the purchase or carrying of securities are to be treated in the same manner as bank loans made for that purpose—that is, they are subject to Fed margin restrictions.

The banks feel this requirement puts them in the position of acting as "FBI agents" on their non-purpose loans—loans with stock as collateral but ostensibly not for the purpose of purchasing or carrying securities—and they are calling their loans from the money lenders.

This doesn't mean that all the money lenders will close up shop. Most of them have done a factoring business—purchasing accounts receivable from businesses—as well as stock lending. They will now concentrate on their old trade. Those with independent sources of credit may be able to continue lending on stock, but it seems clear that the bigger ones are being forced out by the Fed's new move.



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Treasuries Face Sibling Rivalry

Competition from other high-yielding federal issues—government-backed mortgages and agency securities—is one of the factors cutting sales of Treasury bonds.

One reason for the Treasury's recent difficulties in selling government bonds is some tough competition it encounters right within the federal family—from the little-known securities of various federal agencies and from the much better-known government-guaranteed mortgages.

Even though the return on Treasury bonds is, in some cases, the highest in nearly 40 years, these other government issues offer even fatter yields, and sophisticated investors are finding it out in increasing numbers.

It didn't take that, of course, to put the U.S. government bond in disfavor. Investors hungry for profits have been turning to the stock market or real estate instead. In the high income-tax brackets, they have been savoring the tax-free interest payments available from state and local government bonds. Some institutional investors have been reaping rich harvests from medium-grade corporate bonds. But investors seeking a "gilt edged" look in their portfolios used to prefer Treasury issues; now, however, more and more are examining insured mortgages and the securities of federal agencies.

• **Generous Returns**—Here are a few examples of the returns that can be realized from such issues:

- A Boston institution invested in a government-backed 30-year mortgage that will net it 5.39% after servicing and other charges—1.2% more than can be obtained on a 30-year government.

- A corporation in Chicago bought part of a \$150-million issue offered by a Federal Intermediate Credit Bank this month at 4.45%—half a percentage point over the longest Treasury bills.

- A Boston investment company was among the purchasers of a \$150-million Federal Home Loan Bank issue priced to yield 4.0%—more than half a percentage point over the Treasury bill rate.

- A wealthy Hartford investor plunked some of his stock profits into bonds issued by the Public Housing Administration. The longest-term bonds in the group pay as much as 3.88% tax-free—equivalent for this investor to more than 19% in taxable interest.

- **Generous Supplies**—For investors interested in such prospects, there are plenty of insured mortgages and agency financings around. Outstanding agency obligations have increased from about \$1.2-billion in 1946 to \$8.2-billion today. Meantime, the volume of mort-

gages guaranteed by the Federal Housing Administration has jumped from \$3.9-billion to \$24.8-billion, and Veterans Administration-backed mortgages have grown from \$2.4-billion to \$30.4-billion. The total of government-backed mortgages has risen nearly tenfold in the 13 years, a period when the total of all mortgages was multiplying only fourfold.

The various programs supported by all this financing were mostly born during the Depression of the 1930s or earlier times of trouble to relieve distress in two fields—housing and agriculture. These agencies issue debt obligations:

Federal National Mortgage Assn. (Fannie Mae) tries to offset sharp price swings in mortgages by buying when credit is tight and selling when credit is easy. It finances these operations in the open market by selling debentures in the capital market. It has more than \$1.9-billion in debentures outstanding and authority to offer \$2.1-billion more.

Federal Home Loan Banks provide credit reserves for savings and home-financing institutions. Their 4,500-plus members—savings and loan, building and loan homestead associations, savings banks, and cooperative banks—own all capital stock in the 11 district FHLBs. The public now holds \$699-million worth of FHLB's consolidated notes and bonds.

Federal Intermediate Credit Banks supply seasonal credit reserves for discounting agricultural paper of up to five years' maturity and for making loans to institutions lending on crops and livestock—such as state and national banks, production credit associations, and agricultural credit corporations. Investor portfolios now contain \$1.2-billion of FICB collateral trust debentures.

Banks for Cooperatives are a permanent source of seasonal credit for farmer cooperatives—in which the farmer members jointly market their products, buy supplies, and perform business services. Investors now hold \$258-million worth of these banks' consolidated collateral trust debentures, up from \$25-million only nine years ago.

Federal Land Banks, now completely owned by some 900 national farm loan associations, supply long-term loans on first mortgages, ranging from \$100 to \$200,000, to farmers and ranchers. Almost \$1.8-billion in Federal Land

Bank bonds are in the marketplace.

Public Housing Administration issues bonds on behalf of local housing authorities to finance low-rent housing projects. It has close to \$2.3-billion worth of bonds in investor hands; interest payments on the issues are exempt from state and federal income taxes.

• **Liquid Market**—Because of the keen interest by institutional investors in both the agency issues and government-backed mortgages, the market in them has become much more liquid than it used to be. Insurance companies, for example, are now saying that they are eager to buy insured mortgages, described as "the answer to rising costs" by the officer of one company. "They look as good to us as a government bond," he adds, "and the way the government market is now, they are hardly any less marketable."

Unlike FHA and VA mortgages, the obligations of federal agencies in general are not guaranteed by the government. Even so, says the investment officer of a commercial bank, "as a practical matter, they're as good as a government bond to us—and better-priced." Investors seem confident that the federal agencies would not default in bad times. This confidence is reflected in the entry of corporations as a big factor in the agency market in the last two years. Comments one treasurer: "Their financial operations are carefully watched by the government, and bonafide collateral backs up every penny of their debt."

• **Short and Long of It**—In their borrowings, most of the agencies generally operate in the short-term market. The intermediate credit banks, with their seasonal demand for funds, usually borrow in the spring and pay off in the fall by issuing nine-month debentures in varying volume. The home loan banks ordinarily borrow in the fall and relax through the winter; this spring, though, they have been borrowing heavily. The land banks and Fannie Mae tend to stretch their debt out further, when possible, and the Housing Administration floats bonds maturing as far into the future as the year 2000. However, most of the long-term financing is in insuring or guaranteeing mortgages. Though all the organizations began under federal ownership, private equity capital is gradually replacing the government stake in most of them.

Financial observers expect these issues to continue their rising trend in volume—and with correspondingly higher yields than governments. Notes one banker: "If government yields rise—assuming Congress lifts the 4½% ceiling—then there will be pressure for mortgage rates to rise and for yields on agency obligations to go up. If they don't, they won't be competitive in this age of tight money." **END**

In the Markets

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Decline in Some Stocks Balanced

By Advances in Other Groups

The stock market this week continued marking time. Some groups did well, including the aluminums, but others, particularly oils and utilities, faced selling pressure. Thus the averages were little affected, but individual stocks, and groups, experienced wide movements.

Analysts are almost unanimous in agreeing that the current market is dominated by individual movements. When stocks come into disfavor, investors either sell or stop buying, which has brought about some large declines. The oils, which were once considered an essential part of every portfolio, individual or institutional, are currently suffering from just this sort of cooling off. Investors are apparently convinced that the oil stocks no longer offer the appeal of almost certain growth.

But the downturn in oils does not mean that the market as a whole is suffering. Instead, money freed by sales of oil stocks, or money formerly ticketed for their purchase, is going into other issues—metals, capital goods, and electronics. These issues are actually benefiting from the shift in investor sentiment.

Thus, investors remain equity-minded. There have been some shifts into high yielding bonds, but, for the most part, money coming out of stocks is being re-invested in stocks, while new funds are still pouring mainly into equities. So though the market may be in for a further period of consolidation, there appears little risk of a sharp sell-off. Stocks are still in demand.

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Cuban Bonds Keep Sliding

Under Land Reform Pressure

Cuban bonds are taking a beating in the U.S. market. This week, Cuba's 4½% dollar bonds due in 1977 traded at 90, far below their high of more than 114, hit in 1956. The bonds dropped below par shortly after Fidel Castro assumed power and announced an agrarian reform law. They have been tumbling ever since. Some brokers say there is "virtually no market" for Cuban issues, and they add that any show of demand would quickly lead to a selling wave.

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Utility Stocks Decline Almost 10%

As Yields on Bonds Increase

A bear market has developed in the utility stock group. This week, the Dow-Jones utility average dipped to 85.31, which compares with a high of 94.70 in March.

Analysts attribute this drop of almost 10% to the inclination among investors to equate yields on utility stocks with the yields on utility bonds.

Utility stocks were a favored group during the 1957-8 decline. They continued to rise when the bull market resumed, particularly the "growth" utilities (BW—Jan. 1759,p109), which have managed to increase earnings at a fast clip. But as money rates increased, yields on utility bonds rose above the yields on stocks. Investors have apparently been switching to take advantage of the higher yields available on bonds.

Some analysts think that the utilities are being oversold. They question the view that utilities are "money market" stocks; on the contrary, they point out that the growth of the utilities is closely tied to the rise in economic activity. This is particularly true of the "growth" companies in the field, which have been able to get higher rates as their borrowing costs rise.

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Pressed Metals Suspended by ASE

For "Unsuitable" Operating Results

Pressed Metals of America, Inc., one of the companies controlled by financier Frederick W. Richmond, has been suspended from trading by the American Stock Exchange on the ground that its financial and operating results make it "unsuitable" for trading. An exchange spokesman said the company has operated at a loss for the last five years. Pressed Metal's stock traded at about \$1 per share this week.

A spokesman for Richmond admitted that the company has been hunting unsuccessfully for merger candidates for the past 18 months in an attempt to bolster its earnings.

But he said that Pressed Metals—whose assets mainly consist of one plant in Michigan—is currently negotiating with an "excellent prospect." ASE said it would re-examine its decision if the merger went through.

• • •

The Markets Briefs

Pacific Telephone & Telegraph announced this week plans for a 7-for-1 stock split. American Tel & Tel, which split its stock 3-for-1 earlier this year, holds an 89% interest in Pacific. On the news Pacific Tel & Tel's stock jumped 23 points to hit \$178, a new high for the year. And some hopeful investors also bought New England Tel & Tel, which is normally a slow mover; it rose \$9 per share.

Bache & Co., the nation's second largest brokerage house, will open an office in Frankfurt, West Germany, July 1. It will be the first branch set up by a U.S. brokerage firm in Germany since the war. Bache hopes the new office will be a two-way street—channeling U.S. funds into German securities, as well as acting as a funnel for West German banks and brokers interested in U.S. and Canadian securities, particularly now that convertibility has freed capital flow.



How to make the most of a minute

Why don't you ask J. Lehmkuhl, President of The United States Time Corporation, America's leading watchmaker? With a product that's so persistent a reminder of the most costly ingredient that goes into any other man's product, he's an authority on this subject. In fact, you can be sure we didn't get him to sit still very long for this picture. Perhaps, too, that's why Mr. Lehmkuhl subscribes to Business Week. No other magazine prints so much news of business, compacted into mini-

mum minutes of reading time. When you publish "for management only," urgency is your chief editor, and you earn respect as much for editing out the non-essentials as for what you put on paper. That Business Week is "best read" of all general-business magazines confirms this. And its reputation as the "most useful" general-business or news magazine draws the greatest management readership per advertising dollar. *A McGraw-Hill Publication—Member Audit Bureau of Circulations.*



A McGraw-Hill Publication

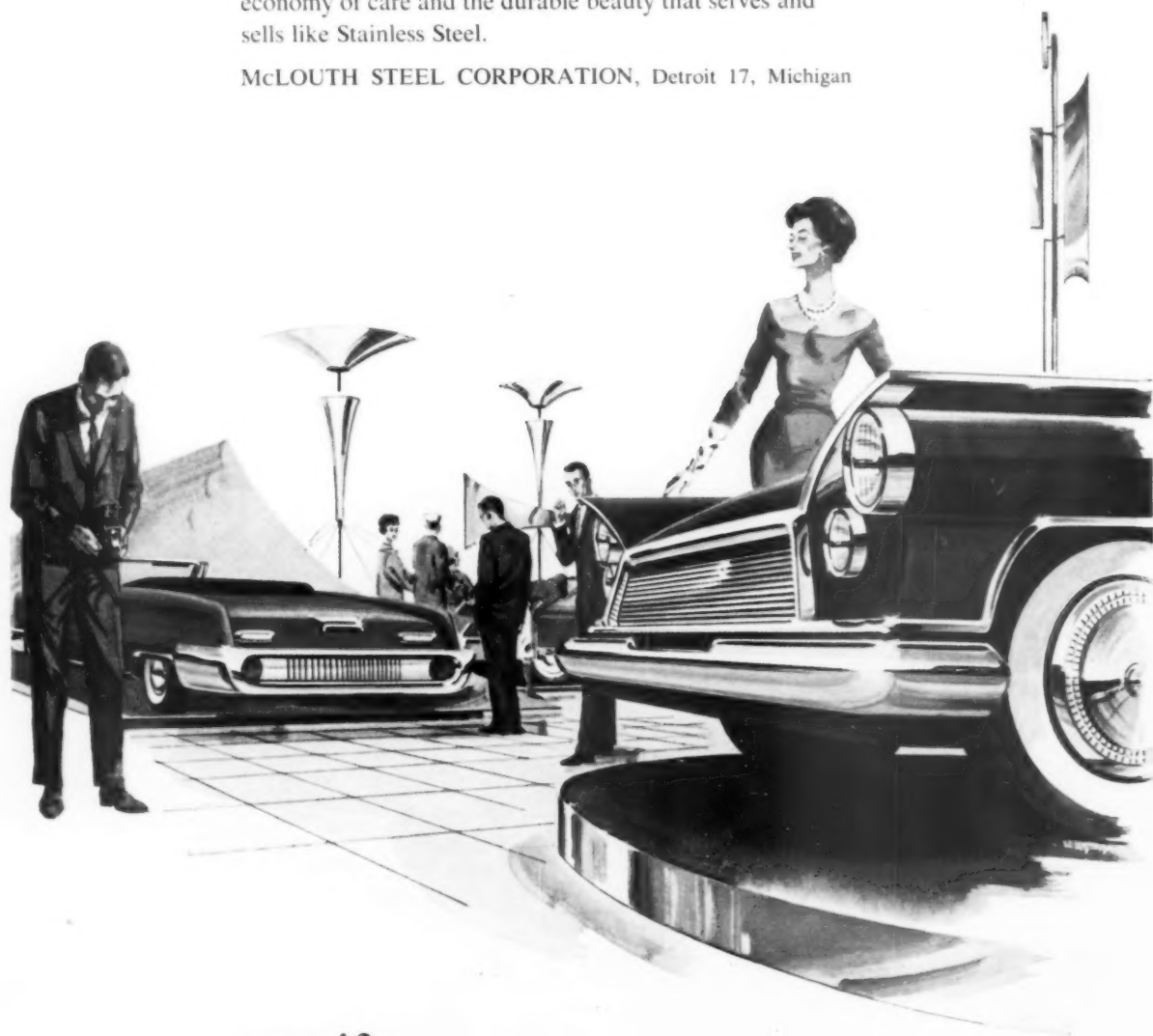
YOU ADVERTISE IN BUSINESS WEEK WHEN YOU WANT TO INFLUENCE MANAGEMENT MEN

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No other metal offers the freedom of design and fabrication, economy of care and the durable beauty that serves and sells like Stainless Steel.

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specify
McLOUTH STAINLESS STEEL
HIGH QUALITY SHEET AND STRIP
for automobiles

PERSONAL BUSINESS

BUSINESS WEEK

JUNE 27, 1959



If you're in a spending mood and you've shied away from foreign cars because they're "underpowered and small," check the luxury \$10,000-and-up imports—you'll get performance and space, plus the kind of design and special finish you don't see in U.S. automobiles.

True, you can't expect the same cushioned ride you get in your domestic sedan. But if you like speed and fast turning with little or no side-sway, you'll find the European imports a new and exciting experience.

You can bring a car like the Rolls-Royce to a straight-line stop from 60 mph. with your hands off the steering wheel.

There are two basic cars in this class—the four-door saloon, carrying up to five adults; and the gran turismo, a two-door coupe, combining the elegance of a custom sedan with the performance of a hot sports car.

Four-door saloons. The Rolls-Royce Silver Cloud (\$13,995) has a "works" body, finished inside in leather upholstery and walnut paneling; it has automatic transmission, power steering, and two hydraulic brake systems, plus a mechanical system. The Long Wheelbase Rolls (\$17,200) features a glass partition between front and rear compartments.

Except for the radiator grill, the Bentley is a duplicate of the Rolls. Cheapest model sells for \$300 less than the Silver Cloud; the most expensive, the Continental (\$21,750) has a lightweight aluminum body, and a special axle ratio for fast pickup and high top speed.

Because of their unchanging design and long life, the Rolls and Bentley probably are the best investments in their price class. Today, an early post-war model (1948, 1949) in prime condition sells for as high as \$6,000.

The Mercedes-Benz 300D, by Daimler Benz (\$10,400), may remind you of a large domestic sedan on the open road. Biggest difference (aside from styling) is the way the 300D can take a bad curve at high speed, even in wet weather. A four-speed hand gear shift, optional, gives you much better acceleration than does the standard automatic transmission.

The 300D also comes as a convertible sedan (\$13,700), but this model is sold only to a small number of select "VIP" clients.

If you're a Chrysler fan, try out a Facel-Vega Excellence (\$12,800) with a Chrysler Typhoon engine. Riding qualities are like a Chrysler's, and along with this you get fine custom coachwork, plus a body design that combines European and American styling.

Gran turismos. Like most cars of this type, the Aston Martin DB 4 (\$10,366) actually is a thinly disguised sports racing car with a coupe body. Brakes, steering, suspension, and shifting are end products of the company's racing experience—which, incidentally, was capped last week by a first- and second-place victory in the famous 24-hr. Le Mans sports car race. Like its competitors, the DB 4 has a minimum of ornamentation.

This car is for the man with ample sports car experience who wants to move up to something more comfortable. With a top speed of 168 mph., the DB 4 probably is the hottest car in its class—it will go from zero to 100 mph. and back to zero in 26 seconds. Don't plan to use it in normal traffic, since it is temperamental and hard-riding at speeds below 40.

The 3500 GT Maserati (\$11,400) has an Italian "envelope" body like the DB 4. Performance is similar, too, but with the DB 4 having an edge in pickup and top speed. The 3500 GT possesses such unexpected frills

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

JUNE 27, 1959

as a centralized lubrication system, electric windows, and radio aerial.

The Ferrari 250 GT California (\$12,600) gives a fairly smooth ride, but the soft suspension doesn't seem to hinder its ability to get around bad turns at high speeds. The car is for two people, has no jump seat. Ferrari engineers believe the added weight of a rear seat passenger would change handling characteristics. The 250 GT California has no ash tray or cigarette lighter—the theory possibly being that if you drive a Ferrari you'll want to keep both hands on the wheel.

Incidentally, if you'll be in Europe this summer, you may want to buy your car in the country of origin—savings can be great, as high as 30% in some cases (BW—Jun.8'57,p170).

—●—

While the country's leading preparatory schools have full enrollments for the coming fall term, if you find yourself involved in "last minute" enrollment arrangements for your son, don't hesitate to make inquiries. There are always a number of drop-outs before the term begins, the Secondary Education Board points out; so it's not too late to write to your first choice of schools.

If you want to know more about preparatory schools in general, perhaps some located nearer your home, Clarence E. Lovejoy's new **Prep School Guide**, with descriptions of over 1,800 college preparatory schools, will be helpful (Harper, \$4.50).

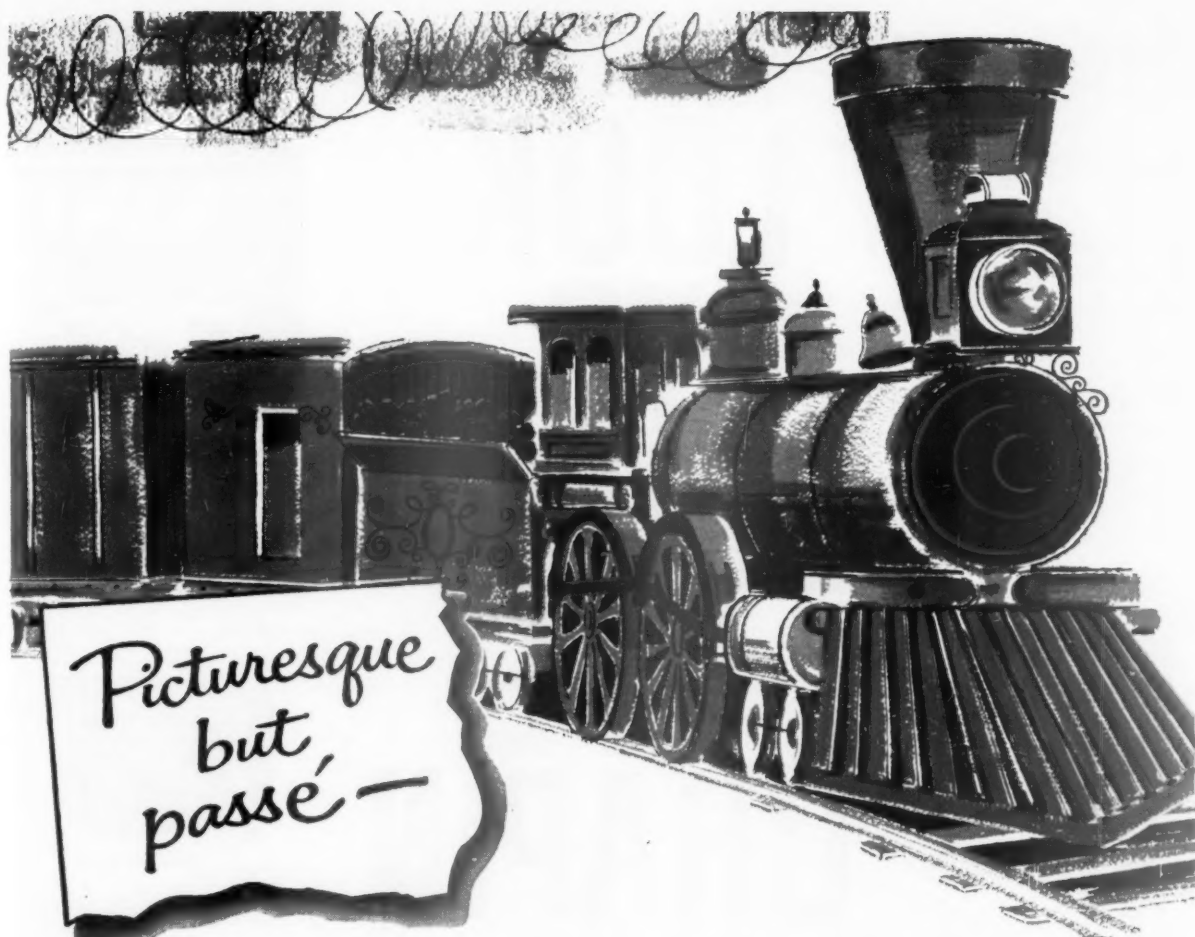
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Planning a new home? If so, you may want to check the new national electrical code (just adopted by the National Fire Protection Assn.) with your electrical contractor. Even though the code is effective only when adopted locally, its provisions serve as a valuable safety guide.

Some important changes: Use of "type S" (non-tamperable) fuses, ruling out substitution of inadequate fuses which would allow overloading a circuit; receptacle outlets placed so no point along wall space is more than 6 ft. from outlet; two 20-amp. branch circuits for small appliance load instead of the usual one; ground-type outlets where equipment is used by a person standing on grounded conductive materials, such as in laundry rooms, work shops, garages.

—●—

Potpourri: The experimental auto insurance "merit plan," started in California in May (BW—Apr.18'59,p182) already has been revised twice to make it easier on careful drivers and tougher on reckless ones. . . . Your adventuresome dollars may be attracted by Treasure Hunters, Inc., of Washington, D. C., now selling common shares at \$1 each. First project: a search for gold, silver, and jewels that went to the bottom of Vigo Bay, Spain, in 1702. . . . White shirts may soon cost you more. One leading company will suggest a 25¢ increase on retail tags. . . . Though it looks like ordinary leisure-hour footwear, the Nok-A-Bout safety shoe has a concealed steel safety toe for protection when you're on a do-it-yourself job, such as working with a power mower (International Shoe Co., St. Louis 3, Mo.; \$10.95). . . . A new version of the rechargeable flashlight battery—first to fit any flashlight—has been announced by Sonotone Corp. Its cartridge is plugged into a household electric socket overnight (\$7.95).



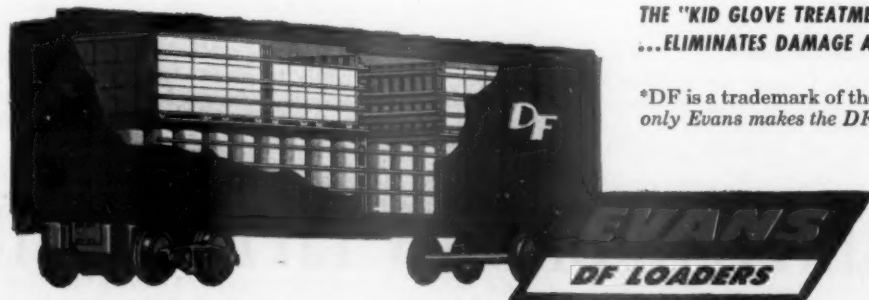
...and so is old-fashioned lading protection

The day of the "iron horse" is done . . . and so is the shake, rattle and roll treatment of freight . . . thanks to Evans DF* equipment.

DF-equipped box cars have virtually eliminated damage in transit. Costly dunnage is a thing of the past.

Today, 50 major railroads offer DF-equipped cars *at no extra cost to shippers*. And these railroads report triple revenue per car over ordinary cars. So whether you're shipper or railroader, don't be content with "iron horse" lading protection. Write today for full details on DF: Evans Products Company, Dept. B-6, Plymouth, Michigan.

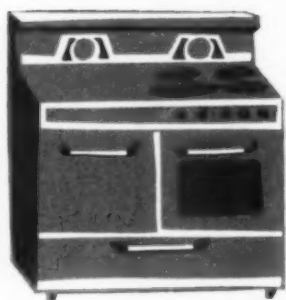
Canadian Representative, International Equipment Co., Montreal;



**THE "KID GLOVE TREATMENT" THAT LOCKS IN LADING
...ELIMINATES DAMAGE AND DUNNAGE**

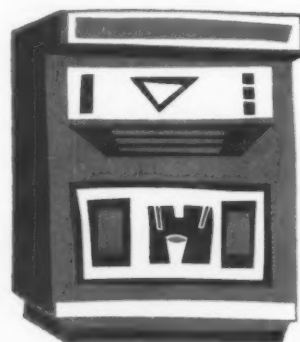
*DF is a trademark of the Evans Products Company...
only Evans makes the DF Loader

*Looking for a **bri...ht** idea for your product?*



HOME APPLIANCES

LOOK TO BROWN LIPE CHAPIN



VENDING MACHINES



BUSINESS MACHINES



MUSIC & COMMUNICATIONS

An experienced source of decorative and functional die castings and stampings!

Consider Brown-Lipe-Chapin when you're planning ways of adding "hard sell" to your product. Brown-Lipe-Chapin, with extensive facilities for die casting, metal stamping—including steel and aluminum, and electroplating, can help give your product distinctive new eye appeal with a new dimension in durability.

YOU GET A CREATIVE APPROACH

Brown-Lipe-Chapin, experienced in providing the mass-consumer field with quality bright work, takes a creative approach to your design problems. An experienced staff of engineers work out the best and most economical method of producing your parts.

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You can count on Brown-Lipe-Chapin for constructive suggestions that often add up to savings in time and money. They'll tackle your most difficult part . . . even if it's up to six feet in length. And complete facilities for

die casting, steel or aluminum stamping, anodizing, electroplating and painting are all under one roof.

YOU BENEFIT FROM RELIABILITY BY BROWN-LIPE-CHAPIN

You're assured of reliability with Brown-Lipe-Chapin . . . *reliability* in step-by-step quality control, work performed by craftsmen who are experienced in meeting the rigid specifications of the automotive industry . . . *reliability* in meeting your delivery schedules right on time . . . *reliability* in facilities that can be quickly converted to model change-overs . . . and *reliability* as a continued source of supply. Brown-Lipe-Chapin will guarantee to supply your requirements for die casting and stamping for as long as you may want to specify.

Brown-Lipe-Chapin's two plants, in Syracuse, New York and Elyria, Ohio, combine 25 acres of modern plant facilities that are ready to go to work for you now. So, before the die is cast on your product designs, contact Brown-Lipe-Chapin, Division of General Motors Corporation, Syracuse, New York.



RELIABILITY by **BROWN · LIPE · CHAPIN**

DIVISION OF GENERAL MOTORS CORPORATION

In Production

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Process for Turning Iron Powder Into Steel Developed by Republic

Republic Steel Corp.'s new Cleveland research center has developed a process for producing strip steel from powdered iron ore without the usual coke ovens, blast furnaces, open hearths, and blooming mills. It is in pilot production, Republic announced last week.

The process has three main steps:

- Iron ore is purified and reduced to a metallic powder.
- Then it is compressed from a powder into a semi-solid strip by rolling between four rolls.
- Finally it is heated to 2,200F in a atmosphere which aids in the removal of oxygen and is passed through a series of hot strip rolling stands.

The last step reduces the thickness of the steel to the desired gauge, compresses it to full density, and produces hot rolled coils. The coils have the same quality as conventional steel, according to Republic, and may be put through the standard steel operations of pickling, cold rolling, and annealing before being recoiled or cut into sheets.

The process generally has been used only for low-carbon steels with little alloying. But Republic has also been experimenting with alloy powders and may come up with a way to add alloy metals in powder form during the compression step in the process.

Republic officials estimate that a commercial plant using the new process could be built for 40% to 50% of the initial cost of conventional melting equipment for the same productive capacity. While they are "extremely optimistic and keenly enthusiastic," they foresee considerable research work before commercial production is possible. **A commercial plant to make strip steel from iron ore powder is still five or six years away.**

Stora Kopparberg, the Swedish company (BW—May 16'59,p102), has a somewhat different process under development for making steel from iron powder and ore concentrates.

• • •

Two Cities Order Sewage Plants Using Flameless Combustion Method

The Zimmermann flameless combustion process for waste disposal (BW—May 24'58,p136) will be used to get rid of municipal sewage. Chicago was the first city to decide to adopt it earlier this month, and last week Wheeling, W. Va., became the second. Sterling Drug, Inc., whose engineers invented and developed the process, will design and build plants in both cities.

The Zimmermann process oxidizes water-borne wastes by combustion in a reactor at high temperatures and high pressures. It converts the fuel content of the wastes into heat and power to operate the process itself. This

makes it much more economical than conventional methods. Pilot plant work in Chicago indicates it also oxidizes more of the wastes, according to Sterling Chmn. James Hill, Jr.

The Chicago plant will handle 200 tons of sewage sludge a day and will cost \$11,870,000 to build. The Wheeling plant will cost \$284,000 and will handle 5.6 tons a day.

• • •

Giant Inflatable Rubber Tube Dams River Channel on Part-Time Basis

A huge inflatable rubber tube is being used as a part-time dam on the Los Angeles river channel in California. Unlike most dams, which are designed to contain flood waters, this one is designed to collapse when flood waters top it by 8 in. Army engineers fear local flooding would result during winter rainfalls if the channel were permanently dammed.

At other seasons, the dam diverts excess water onto adjacent land, where it percolates into ground streams for later recovery by pumping.

The tube is made of neoprene-coated nylon fabric and is bolted to the floors and sides of the 130-ft. channel, which is lined with concrete. It is inflated with water that can be siphoned out in 12 min. It can be filled in 25 min. in emergencies.

The dam cost about \$10,000 and is expected to last up to 10 years. It should save about 3,000 acre-ft. of water—worth \$75,000—annually.

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Contractor Develops New Computer For Estimating Electrical Jobs

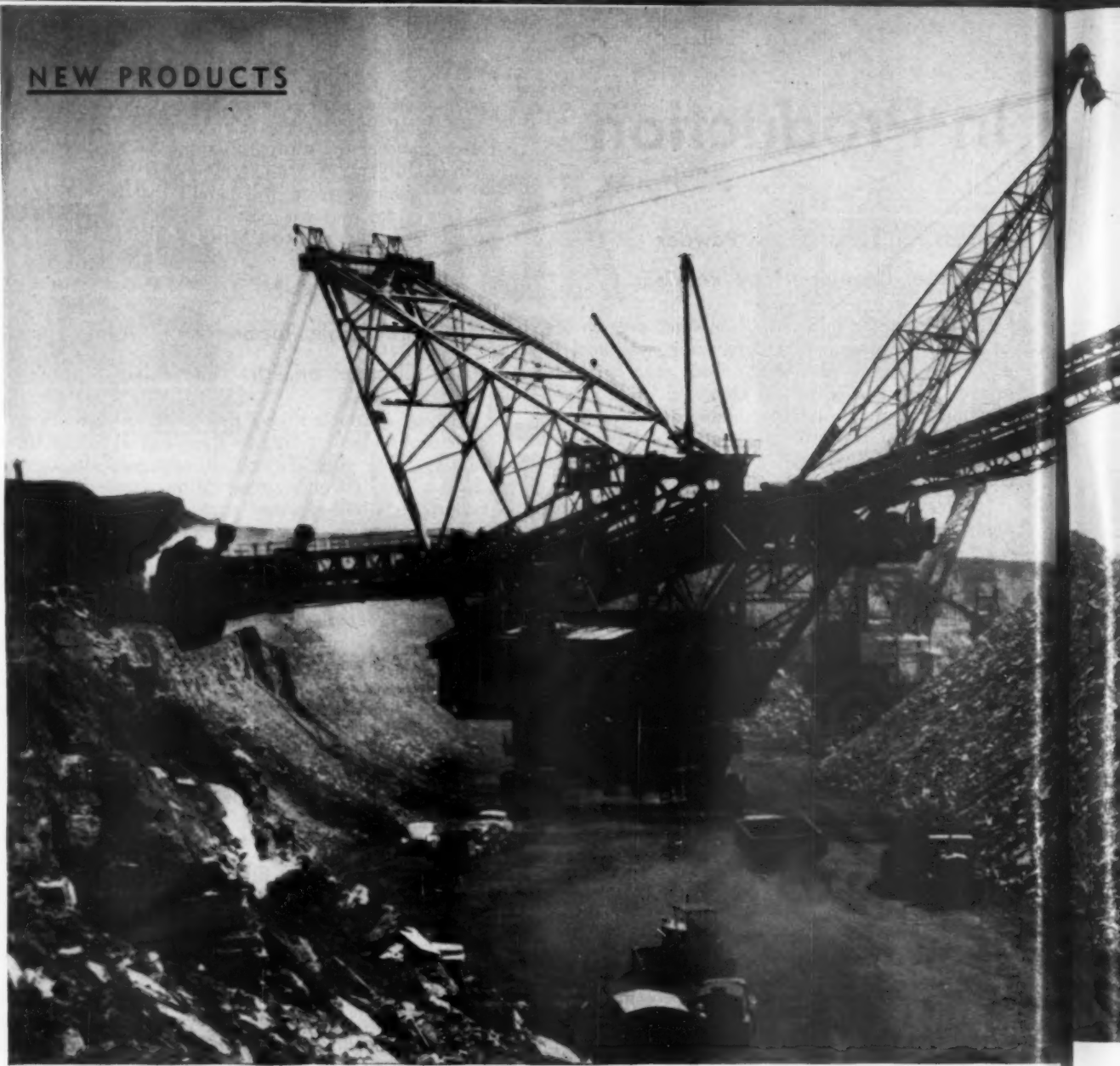
An automatic data processing system for estimating electrical contracting jobs has been developed by a Colorado engineer. Ralph Johnson, president of Sturgeon Electric Co., Denver, has set up Estimatic Corp. to market the system, which he originally created for his own business. Electrical construction experts say it's the first major advance in electrical estimating in over 30 years.

The system enables an estimator to describe every standard operation and assembly by a 10-digit code number in which the digits represent different parts of the job and the materials needed. A loose-leaf manual lists 25,000 code numbers with unit material costs and unit labor hours for each. Code numbers and costs are put on punch cards and processed automatically to produce a detailed estimate, with totals, and a complete bill of materials.

The system enables the estimator to do his job with one-third to one-sixth of the entries usually required. The punch-card processing for a complex industrial installation takes half an hour.

Estimatic is offering the system as a leased service for \$60 a month. A contractor will send his coded estimates to Denver and get his finished information by air mail or wire the same day his query is received.

NEW PRODUCTS



Strip Mining

If you're going to strip mine coal, you can make money only by moving enormous volumes of dirt and rock—the stuff that lies perhaps 100 ft. thick above the coal seam.

So strip miners have developed some of the biggest machines in use. The giant in the picture above combines an excavator wheel (left), dirt conveyor belt, and stacker—and is the biggest of its type in the U.S. It weighs 2,100 tons, towers 150 ft. high, and can move

KOLBE Wheel Excavator bites out a continuous stream of earth, transfers it by conveyor belt to opposite bank.



Gets a 2,100-Ton Helper

3,500 cu. yd. of dirt a distance of 450 ft. per hour.

This Kolbe Wheel Excavator was unveiled last week by United Electric Coal Companies of Chicago. It is the latest of four such digging wheels that the company has developed for its own use. United Electric, one of the first coal companies to mine bituminous coal by stripping off the overlying earth, is one of the largest U.S. companies mining coal exclusively by stripping.

• **Dimensions**—United Electric developed the mammoth excavator to help handle the problem of finding room for the huge volumes of earth it is necessary to strip from a coal seam.

The digging wheel, incorporating 10 buckets each having a $2\frac{1}{2}$ cu. yd. capacity along its outer rim, is used to strip off the top 40 ft. to 50 ft. layer of overlying earth. Mammoth shovels, which can bite out from 70 to 100 tons of rock in one swing, then sweep up behind, clearing away the remaining layers of dirt and rock. The dirt and rock that the wheel bites out are carried by conveyor belt to the stacker, which spews it out neatly on the spoil banks on the other side of the cut. The stacker-conveyor belt, moving at 1,220 ft. per min., imparts enough "throw" to the dirt to extend the reach of the conveyor an extra 30 ft.

The speed of the belt keeps the damp rock and earth from freezing to the belt in winter. Heating and scraping devices were also tried, but United Electric found that the best solution is to speed the belts at above 900 ft. per min. The excavator itself can waddle along on its crawlers at the rate of 14 ft. per min.

• **Production Plans**—United Electric has licensed Bucyrus-Erie Co. to manufacture the machine, which costs approximately \$3-million, and is negotiating with Krupp in Germany to produce it for the European market. One other company has already placed an order for the Kolbe wheel. **END**

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with carload freight service*

- ① Sentinel Service offers dependable schedules on carloads, *siding-to-siding!*
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B&O BALTIMORE & OHIO RAILROAD
Constantly doing things—better!



It's One-Piece Plastic

Some of the largest and heaviest one-piece moldings of rigid polyethylene plastic ever made for a consumer product floated into top shops this week, in the shape of the bathtub-size sailboat pictured above. The boat, made of a single thick sheet of Phillips Chemical Co.'s Marlex polyethylene, weighs only 8 lb., yet reportedly will not founder with a 160-lb. crew—on a calm day. Technical Plastics Co. of Culver City, Calif., makes the boats, which sell for about \$30.

NEW PRODUCTS BRIEFS

Double-height straddle carriers are Clark Equipment Corp.'s answer to the loading and unloading problems that railroads, truckers, and ocean freight lines are running into with their van-size cargo containers. The new Clark carrier can drive straddle-fashion over a string of flatcars and remove any container over the heads of the other containers. It can also be used to stack the boxes, which are 8 ft. high by 8 ft. wide by 24 ft. long, in two-high tiers. Lifting capacity of the carrier is 25 tons.

Castable rubber shielding for atomic airplanes has been developed by Goodyear Tire & Rubber Co. The lightweight shielding, which contains powdered metallic boron, replaces the heavy concrete or water shields that earth-bound reactors use to absorb neutron radiation. Rigid polyethylene can also be used, but Goodyear says its new material is more easily fabricated into the tricky shapes that airborne reactors demand.

A REPORT TO MANAGEMENT ON HOW

Industry cuts costs with FIR PLYWOOD

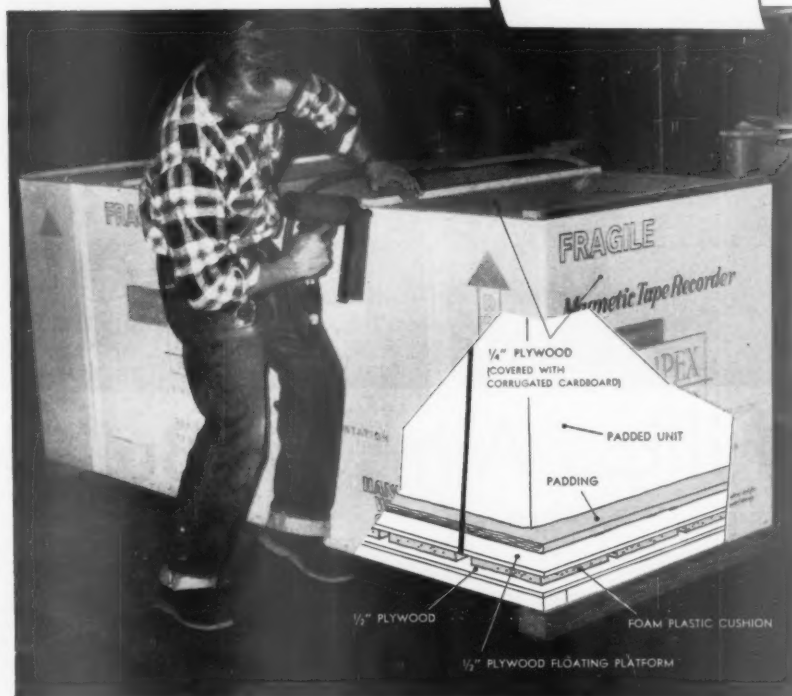
ROUTE TO:

- ☐ ENGINEERING
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- ☐ SALES
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- ☐ MAINTENANCE
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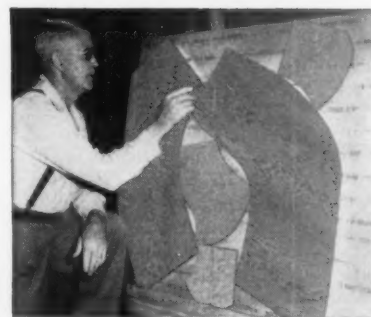
Prize Package—This unique fir plywood shipping container features a free-floating inner floor that virtually eliminates in-transit damage to delicate electronic equipment—yet it costs and weighs only half as much as the bulkier crates it replaces.

Adapted by Ampex Corp., Redwood City, Calif., from a system developed by North American Aviation, the container was an award winner at the packaging competition recently conducted by the Society of Packaging and Materials Handling Engineers.

Termed "free floating suspension" packaging, the system is keyed to a foam plastic-supported fir plywood platform to which the padded lading is securely strapped. Sides, top and bottom of the crate itself are also fir plywood. Plywood construction provides strength and rigidity without the penalty of extra weight, gives maximum impact and puncture resistance, and also simplifies fabrication and assembly.



Fir plywood vaulted roof components helped hold overall construction costs to \$8.10 per square foot on this new Redi-Gas office-display-warehouse building in Tacoma, Washington. The multiple arch roof is composed of curved stressed-skin panels (each four feet wide and spanning 16 feet) which combine roof decking, finish ceiling and insulation. In addition to reducing on-site labor by as much as 80 per cent, the curved roof components permit large clear floor areas, spanning 16 feet without supplementary support from purlins or trusses. Each panel consists of Exterior fir plywood top and bottom skins glued to light lumber framing.



Plywood patterns help save hundreds of dollars monthly at Ryan Aeronautical Co. Fir plywood is cut to exact shapes of parts to be obtained from metal sheets and arranged for optimum cutting. Polaroid camera prints are rushed to production crews within minutes after the layout is approved.

FOR MORE INFORMATION about fir plywood—its uses, properties and advantages—write
DOUGLAS FIR PLYWOOD ASSOCIATION
 TACOMA 2, WASHINGTON
 —an industry-wide organization devoted to research, promotion and quality control

Always specify by DFPA grade-trademarks





Phillips Aims at 'Built-in Value'

Upgrading natural gas and other products (above) is one road to profits; capital spending, Phillips hopes, is another.

One of the principal points of interest on a tour of Phillips Petroleum Co.'s headquarters complex in Bartlesville, Okla. (pop. about 20,000), is a show-room displaying some 300 products that trace their ancestry back to Phillips oil or gas. Phillips people like to show off the diversity of items as evidence of how the company's top management team (cover) has succeeded in extracting from its underground riches just about everything that could yield a profit.

The display also pinpoints another Phillips' characteristic: It is a company with a three-way split personality.

- As an oil company, Phillips is one of the largest integrated domestic outfits; among all U. S. oil companies, it ranks eighth in assets (\$1.5-billion), ninth in sales (\$1.07-billion). It has substantial domestic and foreign production, a string of up-to-date refineries, and a marketing organization that sells Phillips 66 brand petroleum products in a 35-state area.

- Phillips is also one of the largest holders, producers, and sellers of natural gas. While its oil production accounts for about 2% of total U. S. output, its gas production adds up to 7%. Last year, natural gas sales totaled \$77-million, about 7% of Phillips' total

revenue. Much of it was sold to the long-distance gas pipelines under long-term contracts, but an increasing amount is now going into petrochemical plants.

- Its huge natural gas reserves, together with a crackerjack research and development program, have put Phillips deeply into petrochemicals. Right now, its chief products consist of carbon black, synthetic rubber, and butadiene, a wide range of fertilizers, ethylene and polyethylene for plastics, and cyclohexane and a whole raft of other chemicals for use in making synthetic fibers. Last year, petrochemicals accounted for sales of over \$150-million, or some 15% of Phillips' business.

- **Caviar Appetite**—While the oil business has been and will continue to be Phillips' bread and butter, Pres. Paul Endacott, as well as other of the company's top brass, feels that this foray into natural gas and petrochemicals might provide the caviar. They could push over-all company sales up at a much faster clip than would oil alone—and could have a decided impact on sweetening the company's annual earnings.

However, the wisdom of management's faith in its natural gas and petrochemicals has still to be tested—and 1959 seems to shape up as the year for the test.

- **Capital Spree**—Ever since World War II, Phillips has plowed huge sums of money into capital expenditures. In 1956, it reached a peak of \$257-mil-

lion. In relation to the company's size, these expenditures were well above the industry average.

The bulk of these funds was spent on oil exploration and refining, but a good portion went into natural gas drilling and the bricks, mortar, and steel needed for new petrochemical plants. It also went into development work to find ways of upgrading gas and other hydrocarbons into new and profitable products.

While these expenditures brightened the asset side of the balance sheet, they have made the figures on the income statement look quite dreary. The average return on the company's assets has taken a lacing; in 1951, it was 9.45%; in 1958, the percentage fell to 5.56% and earnings for the past several years have been quite static. These figures have not been lost on the Wall Street pros. Some of them have felt that the poor earnings showing is simply the consequence of overinvestment in natural gas and petrochemicals.

- **Payoff Near**—By now, though, most of the bricks, mortar, and development work are in place; most of the new plants are revving up toward full production. In addition, 1959 promises to be a boom business year. So either these operations should rain a shower of dollars and profits into the company till, or stockholders will be asking some embarrassing questions.

If the year's results vindicate management strategy, some competitors who have long considered Phillips a maverick



CHAIRMAN and chief executive officer at Phillips Petroleum is K. S. (Boots) Adams.

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PETROCHEMICALS have been gaining as income source. This chemical conversion unit doubled capacity for a nylon component.

RESEARCH, on which 11% of Phillips' employees work, includes nuclear studies.

"Imagination... is the source of human improvement; Experience its implement"



The giant new Copper Smelter of Kennecott Copper Corporation, Hayden, Arizona; designed, engineered and built by WKE.

THE WKE RECORD OF PLANT SAVINGS

The WKE approach to design, engineering and construction makes the difference in economy of plant investment. It's reflected in the fact that many WKE-built plants have been completed below original cost estimates—even at remote job sites. The men of WKE can assist you in projecting requirements in men, materials, equipment, processes and scheduling by evaluations and studies; a method of accurate appraisal and planning that means more plant per dollar spent!



WESTERN-KNAPP ENGINEERING CO.
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Building for the Future—In a World of Industries



"... natural gas prices have doubled in the past ten years . . ."

STORY starts on p. 150

may have second thoughts about the future exploitation of their own natural gas and petrochemical holdings.

I. Upgrading for Profit

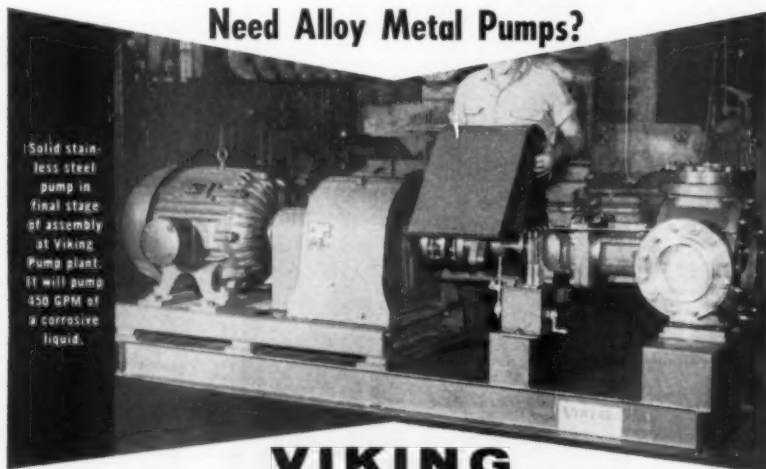
To understand Phillips' enthusiasm for natural gas, you have to go back to the 1930s, when natural gas was used as flare gas; nobody knew what to do with it. It was then that Phillips deliberately began buying huge gas reserves, on the theory that someday these hydrocarbons would be as valuable as crude oil.

The spectacular growth of the cross-country pipelines in the 1940s in a sense endorsed Phillips' logic. Gas that once had been considered waste was eagerly sought after. Before long, demand for natural gas outstripped demand for domestic oil. In the past 10 years, for example, growth in oil demand has averaged about 4% to 5% a year; natural gas demand, on the other hand, has increased at an 8% rate. Equally important, while oil prices have had only a piddling rise, natural gas prices have doubled in the past 10 years.

• **Heightened Values**—The result has been a little bonanza for Phillips. In 1948, it sold gas at an average price of 4.8¢ per thousand cu. ft. (MCF); by 1958 the average price was 10¢. Phillips' new contracts with pipelines are starting off with a sales price of 20-21¢ per MCF.

In 1956, the last time Phillips publicly gave out a figure on its gas hold-

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“ . . . the question is how the payoff from gas and petrochemicals will compare with the oil prospects . . . ”

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ings, they stood at 13.3-trillion cu. ft. If valued then at, say, 7¢ per MCF, Phillips was sitting on a \$931-million nest egg. Assume that these reserves will eventually be worth 20¢ per MCF—as most in the gas industry envision—and the nest egg has swollen to \$2.7-billion. In the meantime, Phillips has enlarged its holdings.

Some other factors in natural gas economics also work in Phillips' favor:

- In most states, the amount of crude oil produced depends on the various regulatory bodies, and in recent years they have cut back sharply on the number of producing days allowed. However, gas wells can be produced roughly at 25% of the open flow rate. That means if you hit a big gas well, you can produce a lot more than if you hit an oil well. It also means the payout period is shorter on a gas well. That's one reason Phillips' domestic drilling budget this year has slated more money for gas wells than for oil.

- The profit margin in gas is handsome. Currently, it's not unusual for profits on gas sales to run around 20%. Moreover, natural gas can be upgraded into products worth several times the value of the fuel.

- **Extracting Products**—One way Phillips upgrades natural gas is simply to strip from it many of the hydrocarbons it contains. One result has been to make Phillips the largest producer of natural gasoline, which can be blended with refinery gasoline to make high-test motor fuels. You can also strip out liquid petroleum gas from the wet gas as it comes from the well; currently LPG is becoming increasingly popular as a tractor and bus fuel and for home heating. Or you can simply put natural gas into a petrochemical plant, add the proper chemicals, and stir. Out comes an avalanche of different products—plastics, rubber compounds, fertilizers, and the like.

Phillips maintains it can make about twice as much from turning gas into petrochemicals as it can from selling it as a fuel. Right now, of the 2.6-billion cu. ft. of gas Phillips processes, about 2-billion cu. ft. winds up as a fuel; the rest goes into petrochemicals. Phillips can sell 26,000 cu. ft. of gas to a pipeline for \$5.20, but the same amount of natural gas can be converted into a ton of ammonia worth about \$88.

- **Sans Control**—Upgrading natural gas is advantageous to Phillips in another way. Sales of gas to pipelines for interstate shipments are subject to Federal Power Commission regulations, but

these don't apply if the gas is processed in the state where it is produced. So much of the company's gas reserves along the Texas Gulf Coast go to chemical complexes that have grown up since the early 1950s in the environs of Houston.

The key to upgrading is research. Currently, Phillips ranks second among all oil companies in the number of patents issued. One reason is that it spends plenty on research personnel; right now it has 2,300 scientists on its payroll—about 11% of total employment. Equally important it has built a cozy rapport between scientists and working management. R. W. Thomas, research and development vice-president, sits on both the company's operating committee and the company board.

- **Economics**—But no matter what helped push Phillips into gas and petrochemicals, the real question is how the payoff from these two fields will compare with the prospects from oil.

Demand for oil promises to increase only moderately; competition will grow fiercer, and restrictive prorationing could play havoc with production and profits. Many in the oil industry figure that a 4% to 5% annual growth, with overall profits in the 6% to 10% range, should be about par.

In natural gas, the figures are more exciting. Growth in demand is expected to be around 5% to 6%—possibly more; prices could well move up around 1¢ per MCF per year. Profit margins, for Phillips at least, are expected to continue around 20%.

In petrochemicals, the pattern of



STANLEY LEARNED is chairman of executive committee, and assistant president.

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"... Phillips has sunk plenty of money into oil plays to replace and enlarge its reserves . . ."

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growth is expected to be well beyond the 6%-10% annual increase predicted for the chemical industry generally. In Phillips' case, there are some estimates that the growth rate may hit 16% and that profit margins may move up from the 6% to 8% level to close to 12%. At Phillips, petrochemicals and gas currently account for about 22% of total revenues, 30% of profits. In four years, they could well bring in 28% of revenues, 40% of net.

II. Still Loyal to Oil

Despite the somewhat dazzling promise of growth in petrochemicals and gas, Phillips has sunk plenty of money into oil plays here and abroad to replace and enlarge its reserves. The move into foreign fields is relatively new; it was made because of the increasing cost and difficulty of finding oil in the U.S. Besides producing abroad, Phillips is out for more business overseas. Last January, it formally created a Foreign Sales & Development Dept. reporting to Vice-Pres. John L. Houchin.

• **Kuwait to Australia**—While Phillips is a late starter in the field, it has already moved into several major areas.

Through a one-third ownership in American Independent Oil Co., Phillips nets about 22,000 bbl. a day from a concession in the Kuwait-Saudi Arabia Neutral Zone. In Jordan, their concession covers a third of the kingdom.

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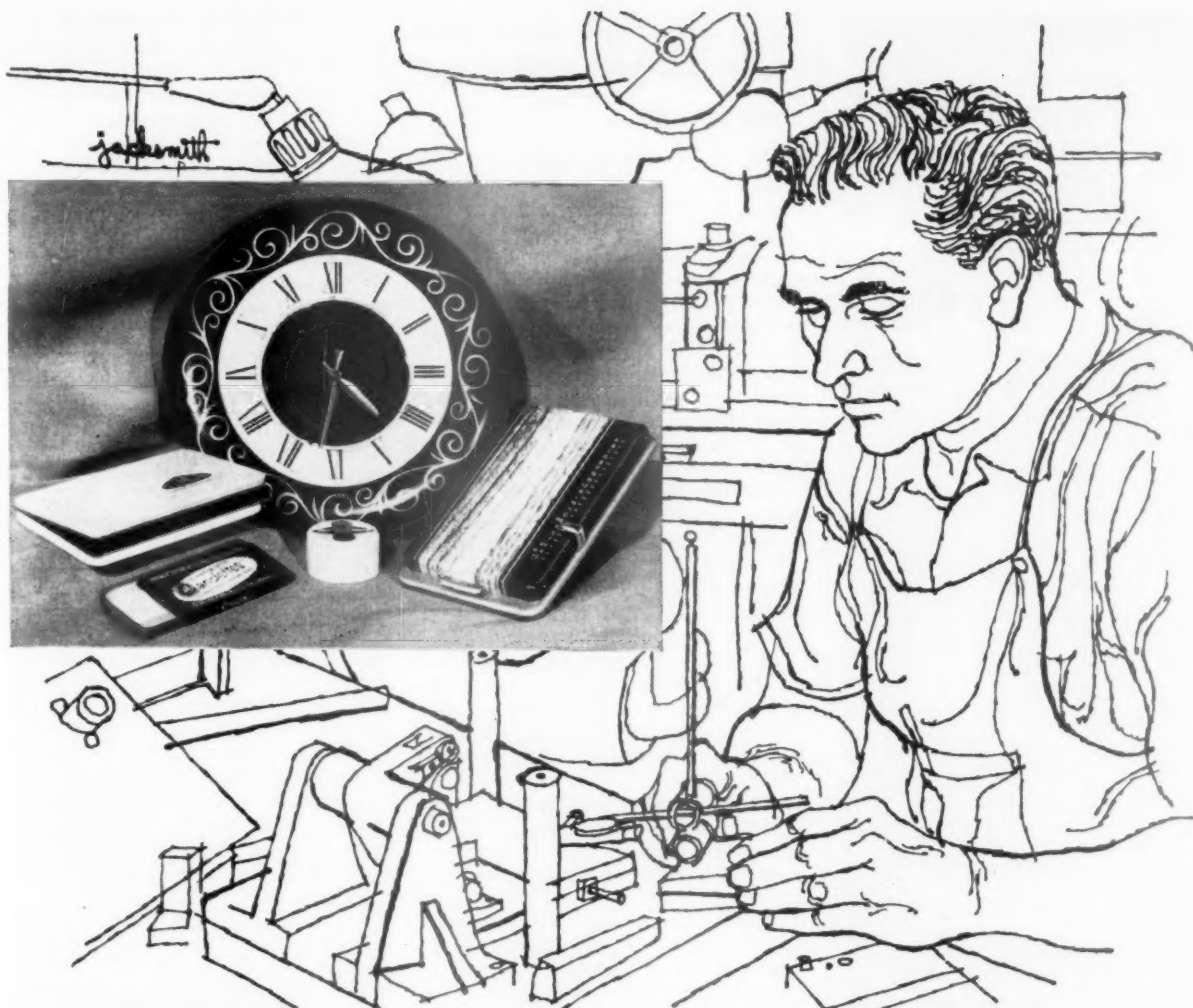
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**"... there are signs that
these 'built-in' values will
soon pay off ..."**

STORY starts on p. 150

oilmen believe someday will rival the Middle East as an oil source, Phillips has the equivalent of 1.4-million acres under lease, and it has already announced a major discovery. Phillips also has exploration crews busy in British Honduras and Australia.

In Venezuela, Phillips has several concessions, including a few blocks on Lake Maracaibo, where it has had some excellent recent drilling success. One interesting aspect of its Venezuelan deal is that Phillips paid for part of its concession in cash, but paid for the balance by giving the Venezuelan government (1) a license for a Marlex plastic plant, with royalties to go to Phillips on its production, and (2) technical aid in building an atomic energy plant.

In Canada, Phillips is active in production, manufacturing, and marketing.

Since Phillips is in partnerships with others in most of its foreign ventures, it doesn't carry all the risk. In addition, where possible, it insures its investments against expropriation or currency freezes through the International Cooperation Administration.

• **Atomics and Rockets**—Hydrocarbons are not the only energy source Phillips exploits. With its expertise in geology and interest in fuels generally, it's not surprising that Phillips is also in atomic energy. Since 1951, it has been working with the Atomic Energy Commission. At the AEC layout north of Idaho Falls, Idaho, Phillips runs the Material Testing Reactor, the first true test reactor; a plant to recover uranium from

spent fuel elements; the SPERT program to test the operating limits and pinpoint weaknesses of various reactors, and the huge Engineering Test Reactor. In the SPERT programs, says R. W. Thomas, "what they do could be compared to hitting a bottle with a bat and finding out how hard you can hit it before it breaks—except you're playing with radiation."

Phillips also purveys "yellow cake," or uranium concentrate, to the AEC from a mill near Grants, N.M., where Phillips drillers hit sprawling deposits of uranium ore several years ago.

The company has also moved into the rocket fuel field; its scientists have developed a family of solid rocket propellants manufactured from readily available petroleum raw materials.

III. The Men Responsible

All these diversified activities are held together by five men at the top reputed to run a "taut ship"—besides Pres. Endacott and Vice-Pres. Houchin, they include K. S. Adams, chairman and chief executive; Stanley Learned, chairman of the executive committee, and W. W. Keeler, executive vice-president. All five usually keep tabs on what's happening everywhere at Phillips, although they divide responsibility for the six companies and 21 departments that make up Phillips Petroleum Co., and for four other subsidiaries and three affiliates.

In day-to-day operations, the burden rests on a 15-man operating committee that meets twice weekly. This "junior board of directors" reports to the executive committee, which makes the ultimate decisions on top-policy matters.

• **Management Gamble**—This top committee has taken a calculated gamble since World War II. They have poured money into a variety of projects—striving for so-called "built-in" values—hoping that especially in gas and petrochemicals, the values will eventually pay off in even fatter profits than they already have.

Of course, just like the oil business, gas and petrochemicals have their own special headaches. There's the problem of overcapacity in ammonia and plastics. Synthetic rubber sales can slump when Detroit can't sell cars. And in natural gas, government regulation has meant expensive law suits and a downhold on prices.

But as of now, there are signs that these "built-in" values will soon pay off. One indication is the fact that Phillips' first-quarter income was up 26% over last year, and up 34% for the four-month period. Both percentages are above the industry averages—all the more impressive, considering Phillips was growing from a better base than the average.



JOHN HOUCHIN, vice-president, looks after Phillips' increasing activities overseas.

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Keeping Consumer Credit In Line

A new boom in consumer credit is under way (page 23). In April, the latest month for which figures are available, extensions of consumer credit jumped \$700-million, and preliminary reports indicate that this trend has been maintained into May and June. If borrowing continues, and there is nothing to stop it, then it will rival the explosive expansion in consumer credit that we experienced in 1955.

Before this new movement gathers any more momentum, the Federal Reserve Board should take another look at the whole question of imposing specific controls on consumer credit.

An increase in the volume of credit, based on rising personal incomes, is healthy for the economy. It means more sales all down the line. But like all good things, it can be carried to excess. This is what happened in 1955, when a large part of the big expansion in consumer credit represented borrowing from the future.

We are still suffering from that bulge. The auto industry, for example, has not yet been able to match its 1955 sales record. And the economy as a whole was subject to distortions because the large amount of credit made available to consumers in a time of monetary restraint meant that other borrowers were faced with both high interest rates and a growing scarcity of funds.

The 1955 lesson showed that consumers are insensitive to general controls over credit. They are unconcerned with the cost of borrowing as long as they can meet the downpayment and the monthly payments that follow. And in 1955, there was a stretchout in maturities—from about 24 months to well over 30 months—that stimulated a big increase in outstanding debt.

In the new wave of expansion there is evidence that this pattern is repeating. The Federal Reserve is once again applying its general credit controls. But under present law it can take no direct steps to curb consumer credit. It is watching on the sidelines as banks and non-bank financial institutions cater to the "buy now, pay later" idea with a host of new charge cards and revolving credit plans.

The money managers recognize that excessive use of consumer credit can be dangerous. They freely admit that the 1955 expansion was discriminatory against other lenders and was a major factor in the 1957-8 recession. But they refused to ask Congress for authority to control consumer credit in 1955 on the grounds that the damage had already been done. And now, with consumer debt rising sharply, they maintain that a stretchout in maturities beyond 36 months is unlikely.

It may well be that there is no room for a major stretchout. But the consumer credit industry is

demonstrating a real ingenuity in stimulating demand. Moreover, renewed competition is leading lenders to reach out for consumers that up until now were considered very questionable risks.

The Fed's reluctance to institute specific controls is understandable. Its past experience with controls over mortgage credit and consumer credit makes it feel that they are an administrative headache. Now that terms are already so liberal, the money managers argue that it would be very difficult to begin a policing operation that would work. They prefer to rely on their general quantitative controls, which, they feel, provide maximum freedom with a minimum of interference by the Fed itself.

But the use of specific, qualitative controls does not involve downgrading quantitative controls. The Fed itself has found that its controls over stock market credit are worthwhile. In fact, it has seen fit to strengthen this specific weapon.

It would not be easy to set up specific controls over consumer credit. But neither would it be a brand new experiment. There is a valuable precedent to draw on in Regulation W, which was in effect intermittently from 1941 to 1952 when the Fed had authority to control consumer credit.

This is the time for Congress and the Fed to sit down to consider just how that experience can be adapted to the present situation. It will not be easy to set up controls, but it is possible and desirable to do so. It will be worth suffering a headache if it means that we can avoid the hangover that is sure to follow a spending spree based on excessive use of consumer credit.

Everybody Loses

The Senate's refusal to confirm Lewis Strauss as Secretary of Commerce is more than just an undeserved slap at a capable and honest man. It is an unjustified—if perfectly legal—intrusion by the Congress upon the rights of the Executive branch of the government. And as such, it is a bad omen for the future of the country as a whole.

Granted that Strauss' previous record had not endeared him to some influential senators, the fact remains that the Senate withheld its consent not because it thought him unqualified for the job but because the Democratic majority saw a chance to harass the Administration.

This particular brand of partisanship is a luxury the country can scarcely afford just now. It is too late for the Democratic leadership to undo the mischief as far as the Strauss nomination is concerned. But after this it can and should see to it that the Senate majority does not have its political fun at the country's expense.

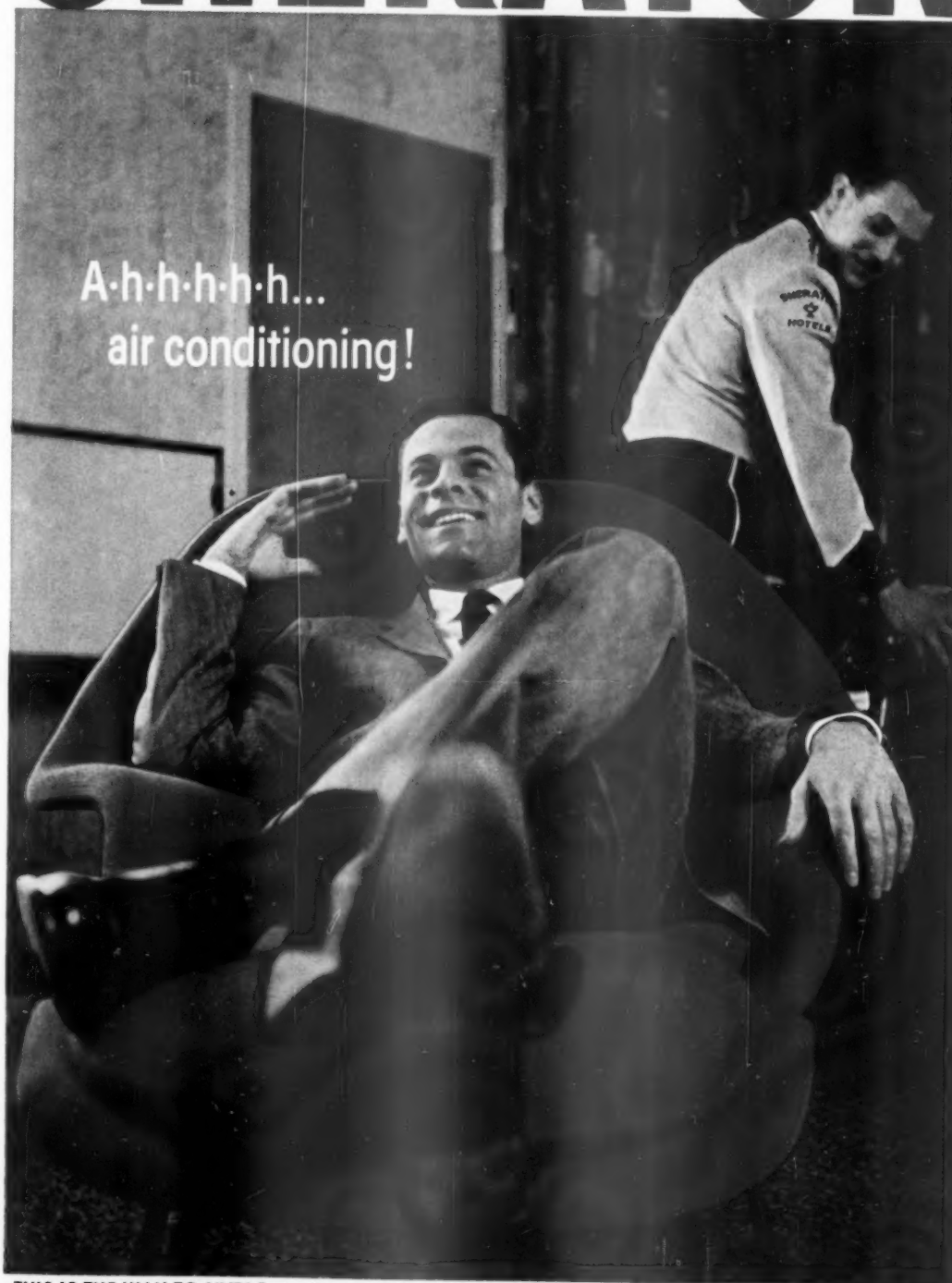
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